



Colorado Legislative Interim Committee on School Finance

Analytical approach and
data and analyses to inform assessment and evaluation of
Colorado's school finance and funding system

June 18, 2018

AGENDA

- Discussion of HB18-1232.
- Analytical approach: Principles-focused evaluation.
- Data and analyses to inform assessment and evaluation of Colorado's current school finance and funding system.
- Pivoting to design: Revision and prioritization of principles.
- Technical simulations and parameters.

FRAMING

- Remain curious. Curiosity is key to learning.
- Employ K-W-L as we move through the discussion of the analytical approach, the principles to be used, and the data and analyses used to assess and evaluate the current school finance and funding system.
 - **Know** – What did you observe? What do you know as a result of what you're observing?
 - **Wonder** – What do you wonder within what you observe? What made you say wow?
 - **Learn** – What more do you want to learn given what you observed?
- What are the implications for the school finance and funding system?
What are the implications for the overall public education system?

Analytical Approach: Principles-Focused Evaluation

- An analytical approach that recognizes the complexity of the school finance and funding system (and the entire public education system).
- Maxim: Every system is perfectly designed to get the outcomes that it gets.
- Identify the principles that should be reflected in the school finance and funding system.
- Use these principles to assess and evaluate the effectiveness and efficiency of Colorado's current school finance and funding system.

Effectiveness & Efficiency: Operational Definitions

- “There’s a difference between doing things right and doing the right thing.”
- Effectiveness is doing the right thing; Efficiency is doing things right.
- “The curious thing is the righter you do the wrong thing the wronger you become. If you’re doing the wrong thing and you make a mistake and correct it you become wronger. So it’s better to do the right thing wrong than the wrong thing right. Almost every major social problem that confronts us today is a consequence of trying to do the wrong things righter.”

What are Principles?

- “...a *hypothesis* until evaluated within some context to determine its relative meaningfulness, truth, feasibility, and utility for those attempting to follow it.” – M.Q. Patton
- Ideas or concepts that relate to the governing of human action and interaction, behavior, and worldview that transcend cultures and time.
 - Different from values which are often individualistic, subjective, and can change across cultures and time.

The GUIDE Framework for High-Quality Principles

Guidance: provides advice & guidance on what to do, how to think, what to value, & how to act to be effective. The principle offers direction.

Useful: informs choices & decisions. The utility resides in being actionable, interpretable, feasible, & pointing the way toward desired results for any relevant situation.

Inspiring: incorporates & expresses ethical premises, which is what makes them meaningful. They articulate what matters, both in how to proceed and the desired result.

Developmental: is adaptable & applicable to diverse contexts and over time; able to navigate complexity & uncertainty because they are sensitive & adaptable to real-world dynamics.

Evaluable: is possible to document & judge whether the principle is actually being followed, & document and judge what results from the principle. In other words, evaluation allows you to understand whether following the principle takes you where you want to go.

Preliminary Set of Principles

1. Align School Finance and Funding to Contemporary Educational Systems, Goals, Objectives, and Learning Contexts
2. Center Allocations Based on Students and Their Characteristics (not organizations/institutions)
3. Provide Every Student Access to Quality Core Learning Opportunities
4. Provide Every Student Equitable Opportunities to Achieve
5. Share Investment in Providing Learning Opportunities to Children of Colorado
6. Make the School Finance and Funding System Transparent and Understandable to Stakeholders
7. Accurately Finance and Fund Learning Needs of Students
8. Maximize Productivity and Efficiency of Learning Resources
9. Locally Control Educational Management and Methods

Principle 1: Align School Finance and Funding to Contemporary Educational Systems, Goals, Objectives, and Contexts

- Aligns to other parts of Colorado's contemporary educational system, including the goals, objectives, and learning contexts.
- A finance and funding system that is coherent with the other parts of the public educational system would serve to strengthen the entire educational system.
- Coherence is a deeper sense of shared understanding of the purposes and stakeholder activities aligned to those purposes throughout the system.
- When inter-related parts of a system are aligned well, the whole of the system is greater than the sum of its parts.

Principle 2: Center Allocations Based on Students and Their Characteristics (not organizations/institutions)

- Desire a school funding system that is “student-centered” as students are the core unit of learning in the educational system.
- Recognizes student enrollment and characteristics and sets funding levels according to those students and their characteristics.
- Funding mechanisms can set funding levels through formula-based adjustments or through out-of-formula programmatic adjustments.
- To what extent does the current funding system set funding levels and distribute funds based on students and their characteristics as opposed to the characteristics of organizations?

Principle 3: Provide Every Student Access to Quality Core Learning Opportunities

- Among the many factors that contribute to in-school student learning opportunities are the availability and access to quality core learning resources.
- Every student has equitable access to quality core learning opportunities—a “base” set of learning resources that provides every student with opportunities to learn to the expected learning standards and outcomes.
- A set of learning resources (quantity) and the price of those learning resources associated with providing a strong core of learning activities.
- “Equality” of resources that are provided for every student as if they come to school with the same prior learning experiences and abilities.

Principle 3: Provide Every Student Access to Quality Core Learning Opportunities – 100-meter dash



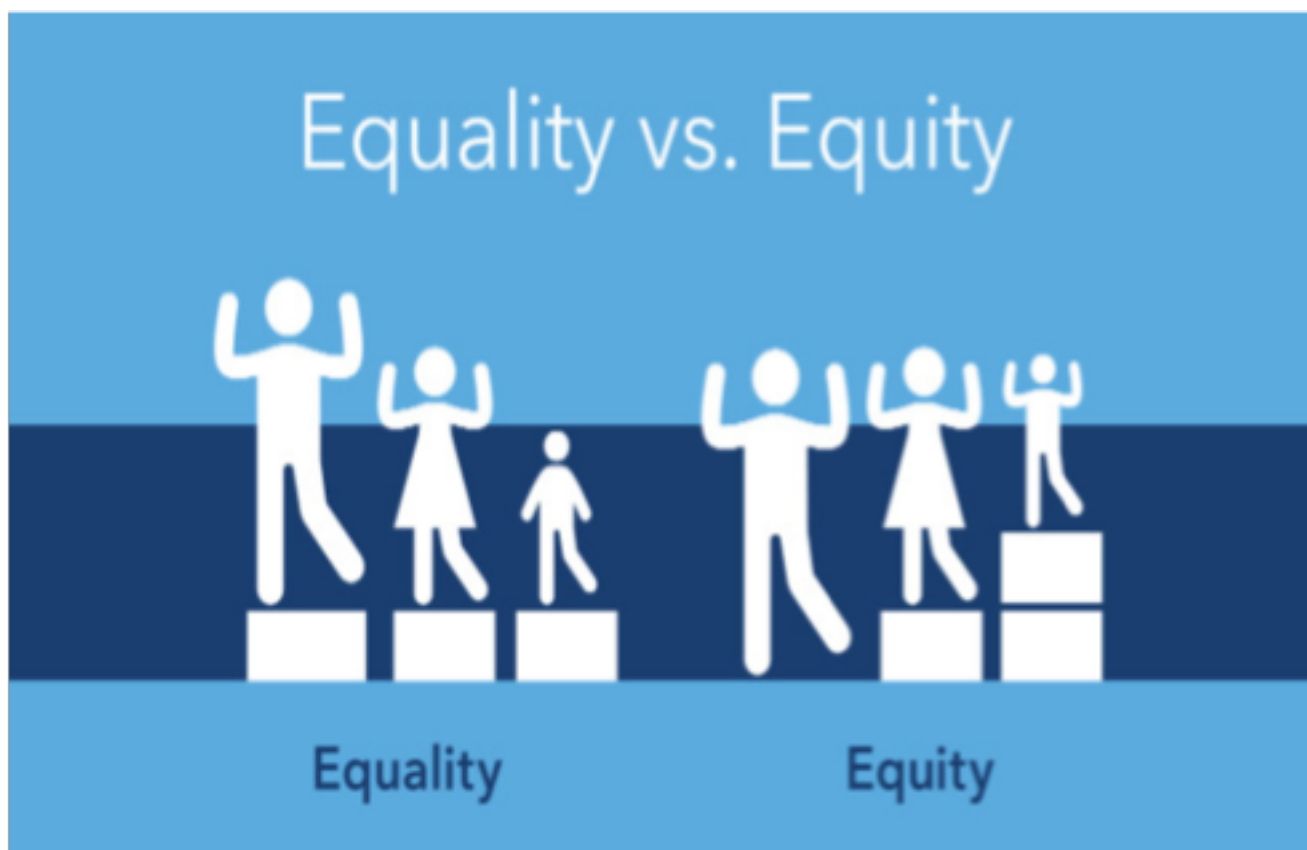
Principle 4: Provide Every Student Equitable Opportunities to Achieve

- Recognize that not every student comes to school with the same previous in-school or out-of-school learning opportunities and experiences.
- The achievement of expected standards and outcomes is typically more difficult for some vulnerable students.
- Equity (versus equality) recognizes the differences in students' prior learning experiences and abilities.
- Equity adjusts the learning resources to those students to provide them a fair opportunity to achieve expected learning standards and outcomes.

Principle 4: Provide Every Student Equitable Opportunities to Achieve



Principle 4: Provide Every Student Equitable Opportunities to Achieve



Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado

- Recognize that there are public benefits associated with an educated populace.
 - Research evidence suggests correlations with long-term societal benefits such as reduced need for income assistance as a result of higher rates of employment and higher income, increased public health, decreased crime and incarceration, and increased productivity and value.
- Investments made by local communities and the state government towards achievement of expected standards and outcomes.
 - Federal investments are intended to supplement local and state investments.

Principle 6: Make the School Finance and Funding System Transparent and Understandable to Stakeholders

- Transparency suggests that the formulas, programs, processes, and procedures are accessible, user-friendly and clear, with disclosure of all assumptions.
- Understandable to the average stakeholder, even if conceptually.

Principle 7: Accurately Finance and Fund Learning Needs of Students

- The charge put to the Interim Committee is to “make recommendations concerning how to most accurately meet the educational needs of students.
- Accuracy is defined as the distance between a measured value to a known value or standard (e.g., how close to the bull’s eye?).
 - Different than precision: A system can be precise without being very accurate.

Principle 8: Maximize Productivity and Efficiency of Learning Resources

- Given the shared investment in public education, there is responsibility to ensure funding is allocated and used well.
- Desire for productive use of resources (read: maximizing students' learning and outcomes) and making efficient use of across the state.
- Principle of transparency also related to understanding how financial resources are translated into learning resources, the effectiveness of those strategic choices, & the cost-effectiveness of different strategies across the state.
- The extent to which systematic feedback mechanisms make meaningful and actionable information available to stakeholders to make decisions to improve productivity and efficiency of learning resources.

Principle 9: Locally Control Educational Management and Methods

- Guthrie's 5 Ms of educational responsibilities:
 - **Models** of learning (e.g., standards) – State primary responsibility
 - **Measures** of learning (e.g., assessments, standardized reporting definitions) – State primary responsibility
 - **Money** (e.g., setting the level of funding levels and their distribution and financing mechanisms for schools/districts) – State primary responsibility
 - **Management** (e.g., supervision of schools) – Local districts primary responsibility
 - **Methods** (e.g., educational strategies) – Local districts primary responsibility
- Colorado stakeholders articulate desire that local communities have primary responsibility for educational management and methods.

QUESTIONS & DISCUSSION

Informing Assessment and Evaluation of Colorado's Current School Finance and Funding System

Effectiveness (doing the right things)
and Efficiency (doing things right)

DATA & ANALYSES

- Preliminary presentation of data and analyses intended to inform assessment and evaluation of current school finance and funding system.
 - Several ways to aggregate and disaggregate data; what's presented here is a fraction of the analyses and visualizations created.
 - The ability to create meaningful and actionable information is dependent on the quality of the data.
 - Different data collection, management, and reporting systems include different data for seemingly the same things. Work done to reconcile for consistent interpretation.
 - Data received from Colorado Department of Education. Compilations, analyses, and presentations are those of FourPoint.
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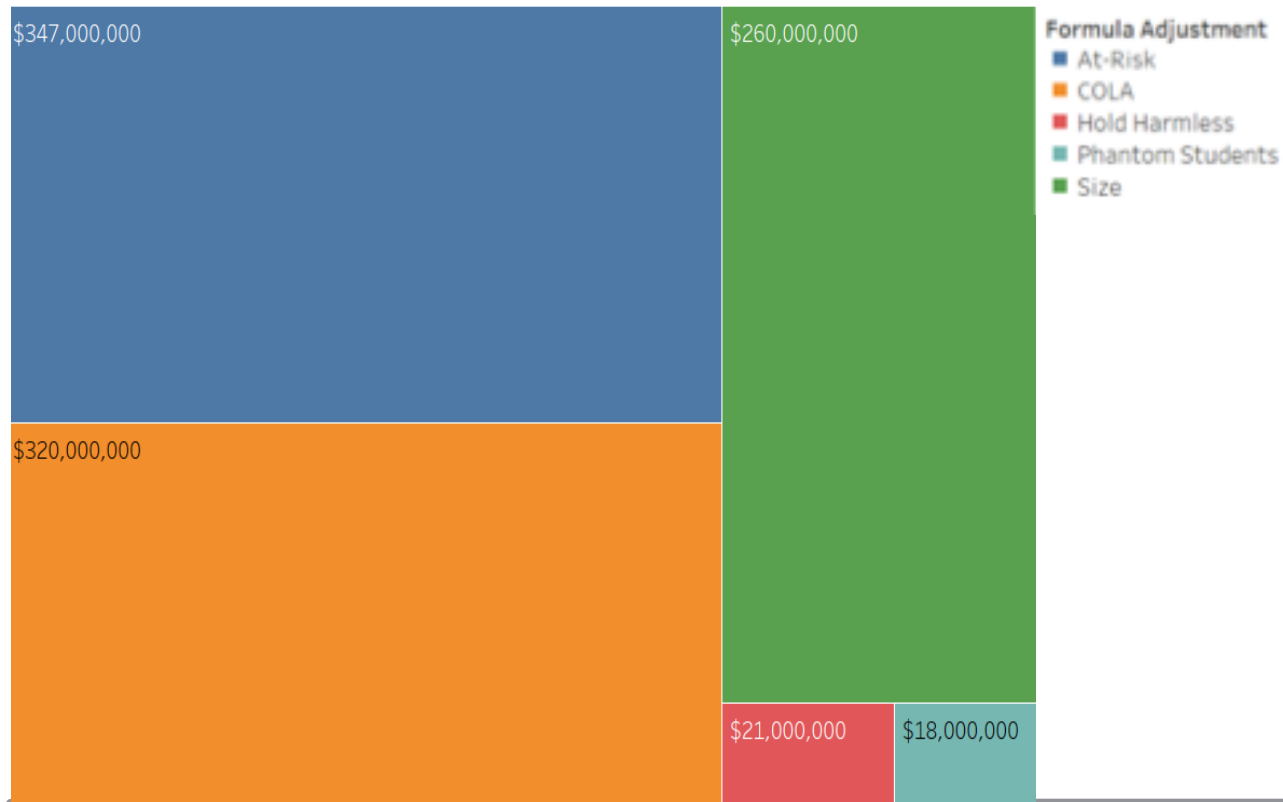
Principle 1: Align School Finance and Funding to Contemporary Educational Systems, Goals, Objectives, and Contexts

- School Finance Act that details Colorado school finance (revenue generation) and funding (funding levels) was adopted by the Legislature in 1994.
- State and school district revenues impacted by statewide Constitutional Amendments -- Gallagher Amendment (1982) and Taxpayers Bill of Rights (TABOR - 1992).
- Funding levels impacted by statewide Constitutional Amendments – Amendment 23 (2000).

Principle 1: Align School Finance and Funding to Contemporary Educational Systems, Goals, Objectives, and Contexts

- Common Core State Standards adopted as part of Colorado Academic Standards in 2010.
 - Assessments to measure impact on student learning towards desired standards adopted shortly thereafter.
 - Colorado Graduation Guidelines approved in 2015; Class of 2021 is the first class to graduate under these requirements.
 - Little change in number of school districts since 1965, the same year that BOCES created.
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Principle 2: Center Allocations Based on Students and Their Characteristics (not organizations/institutions)



- **Total Program Funding Formula Adjustments, 2017-18.**
- At-Risk adjustment using student characteristics of free-lunch program eligibility as a proxy for the effects of poverty is largest of formula adjustments.
- Other formula adjustments are indirectly tied to students.

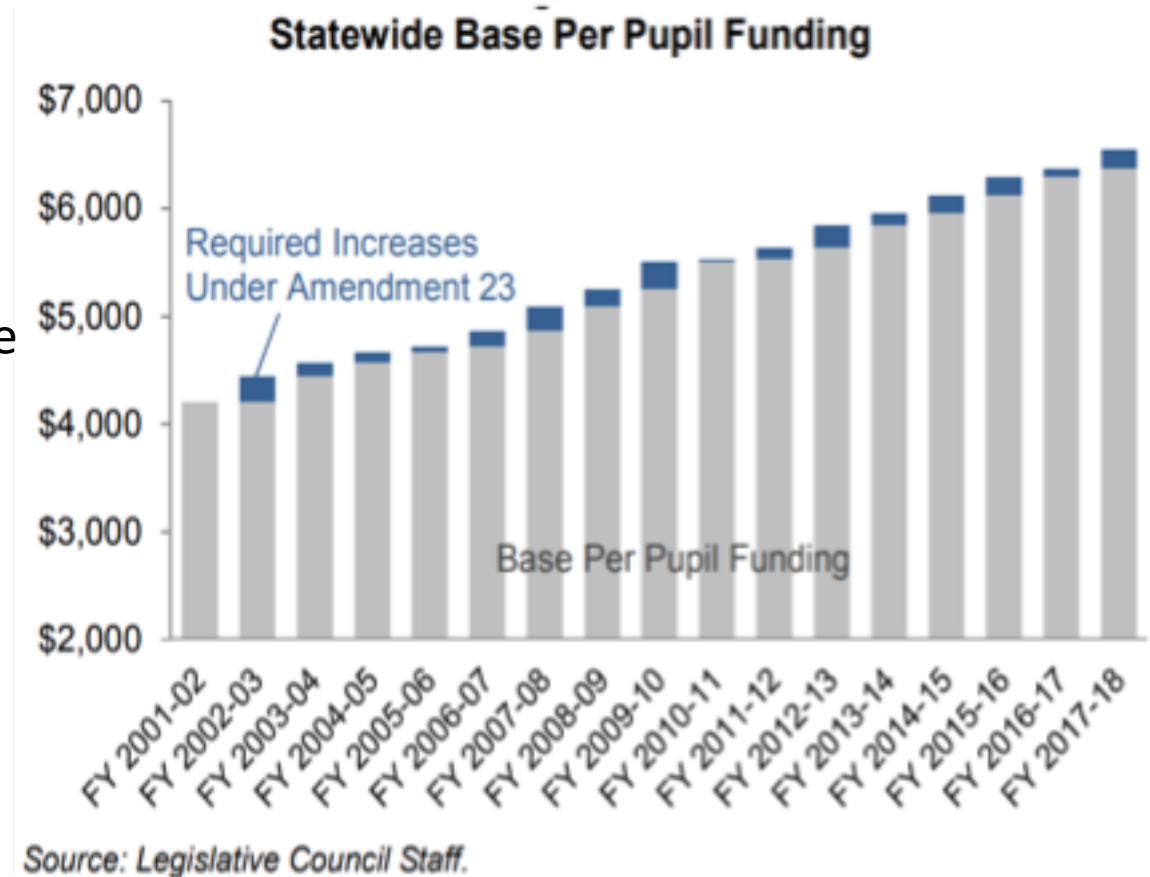
Principle 3: Provide Every Student Access to Quality Core Learning Opportunities

- Base funding in formula funding.
 - Traditional measures of quality using inputs, including:
 - Teacher qualifications, e.g., years of experience, education level.
 - Teacher salaries as a means to recruit and retain qualified and quality teachers.
 - Teacher compensation, e.g., salaries and benefits, as a means to recruit and retain qualified teachers, quality teachers, and teaching quality.
 - Pupil-teacher ratios.
 - Typically see tradeoffs between compensation and pupil-teacher ratios.
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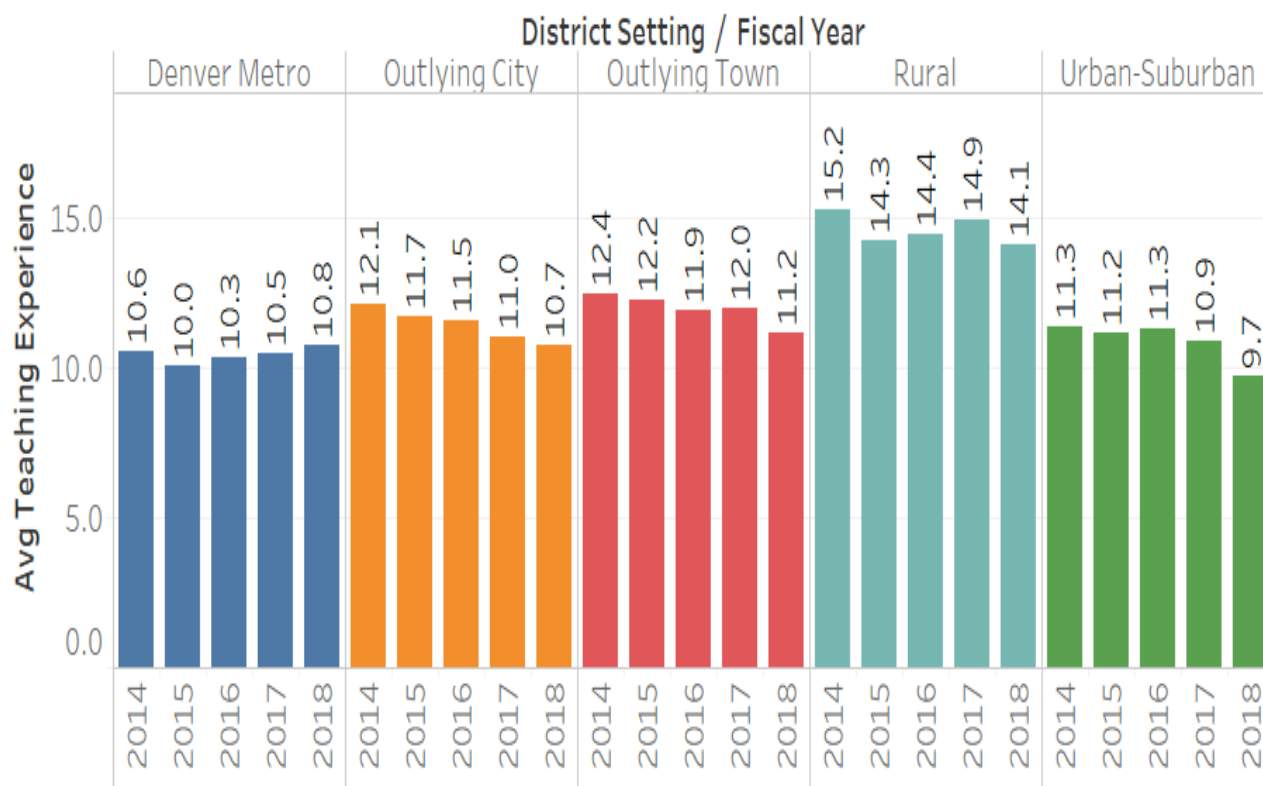
Principle 3: Provide Every Student Access to Quality Core Learning Opportunities

Base Per-Pupil Funding =
\$6,546.20 for 2017-18

- Adjusted by annual rate of inflation as required by Article IX, Section 17 (Amendment 23) beginning in 2010-11
- 2.8% for 2017-18

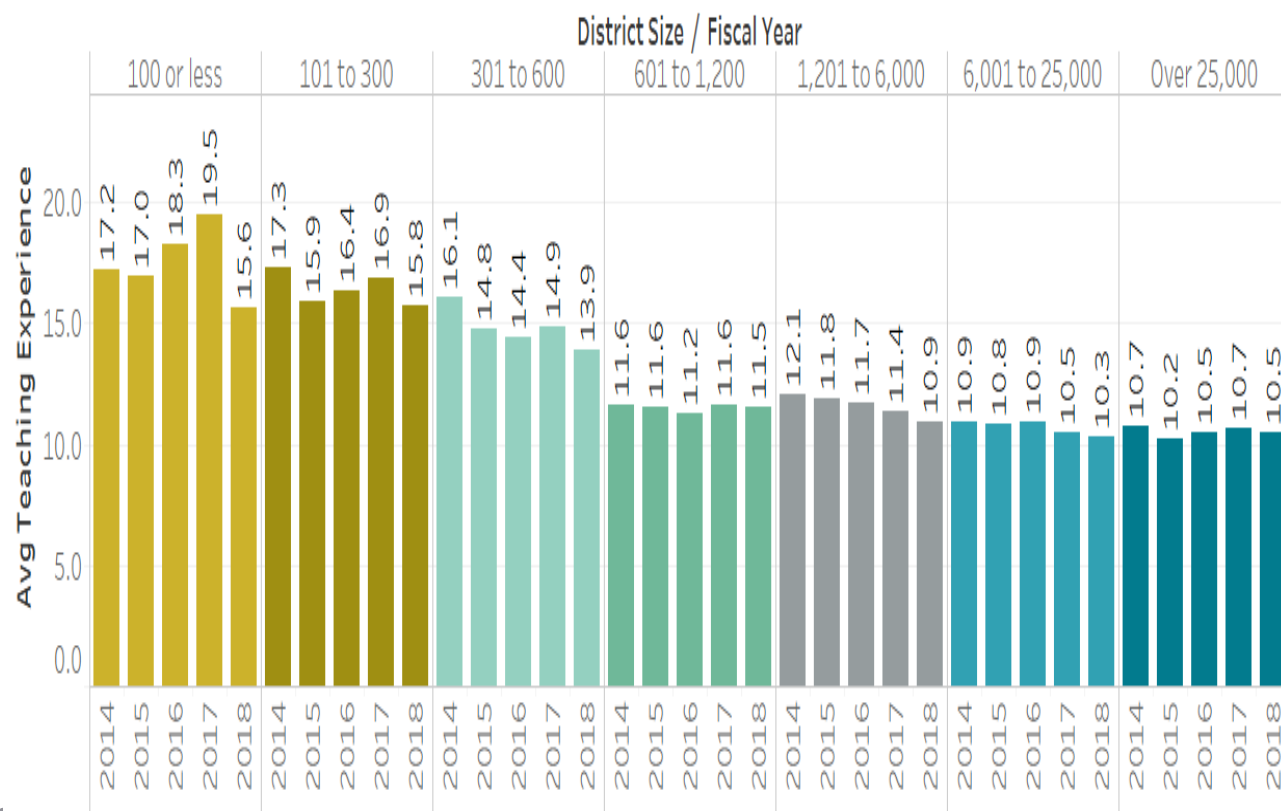


Principle 3: Provide Every Student Access to Quality Core Learning Opportunities



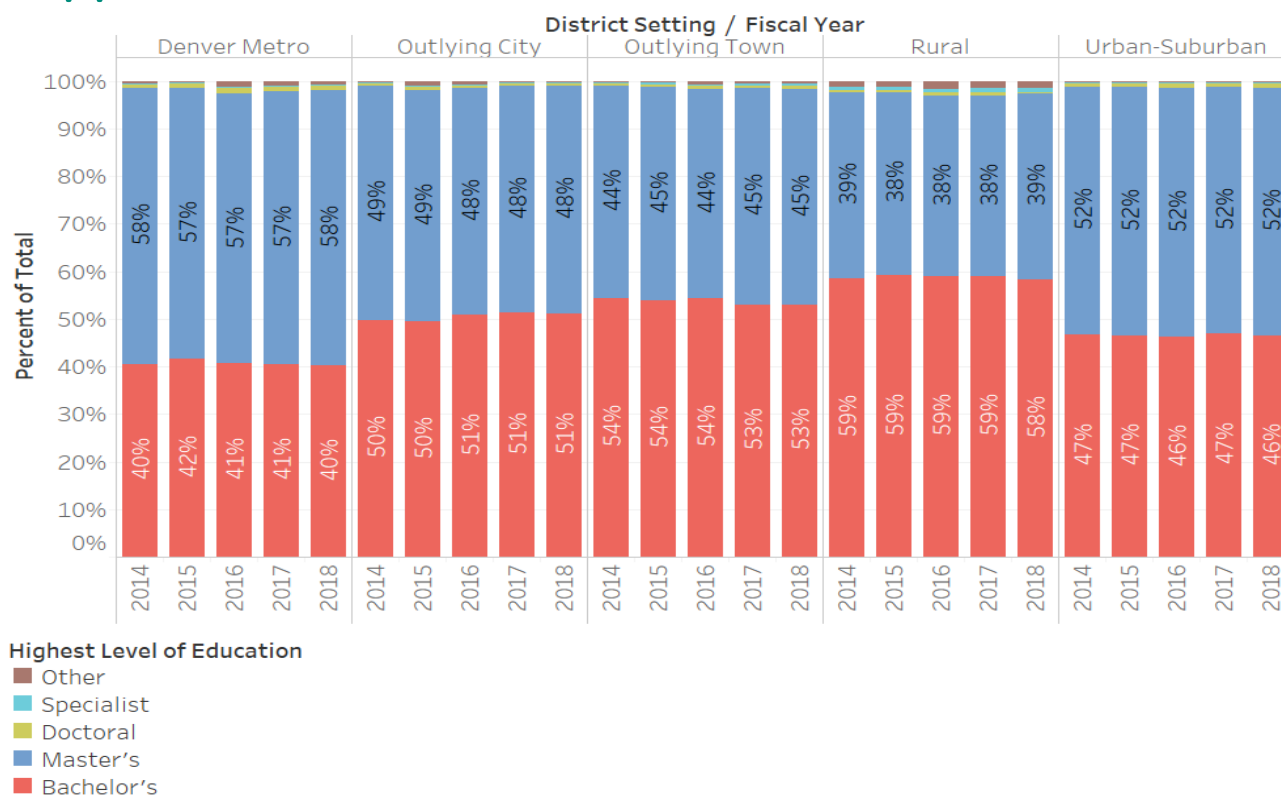
- **Average Years of Teaching Experience by District Setting, 2014-2018.**
- Highest in those districts included in the Rural category and lowest in those districts included in the Urban-Suburban category.
- Slight decreasing trends in average years of experience across most district settings.

Principle 3: Provide Every Student Access to Quality Core Learning Opportunities



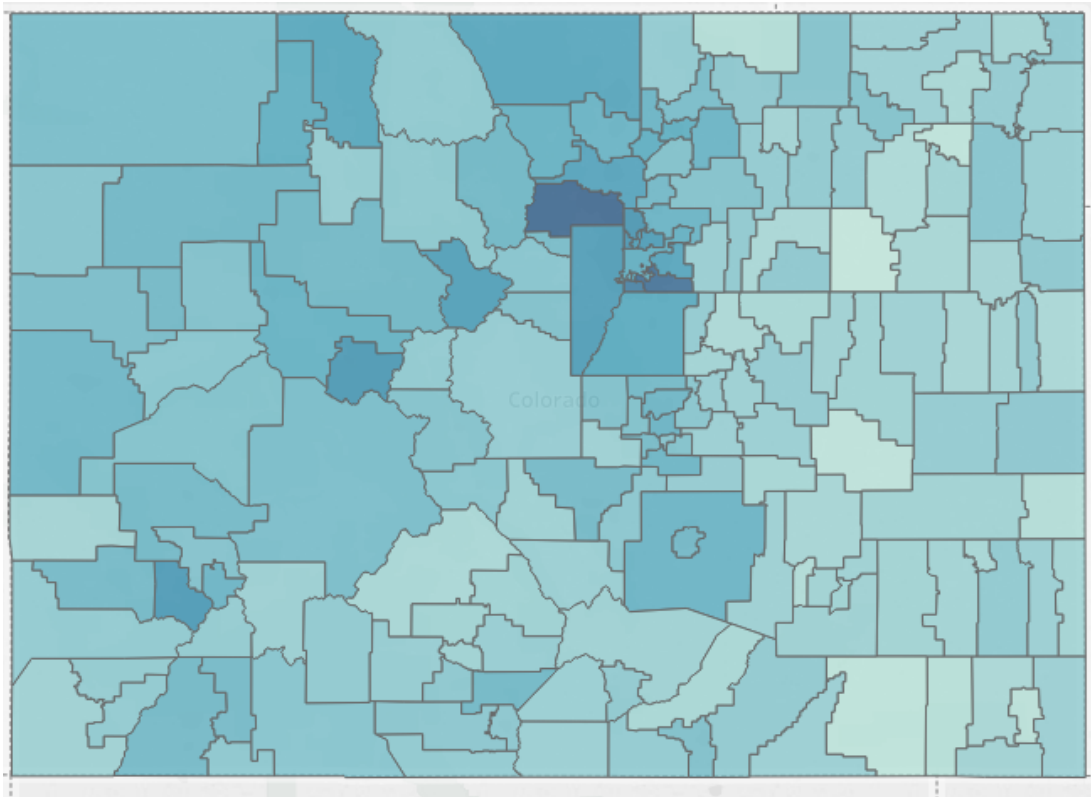
- **Average Years of Teaching Experience by District Size, 2014-2018.**
- Highest in those districts included in the 100 or Less category and lowest in those districts included in the Over 25,000 category.
- Research suggests that teacher effectiveness accelerates through 4 to 7 years of experience.

Principle 3: Provide Every Student Access to Quality Core Learning Opportunities



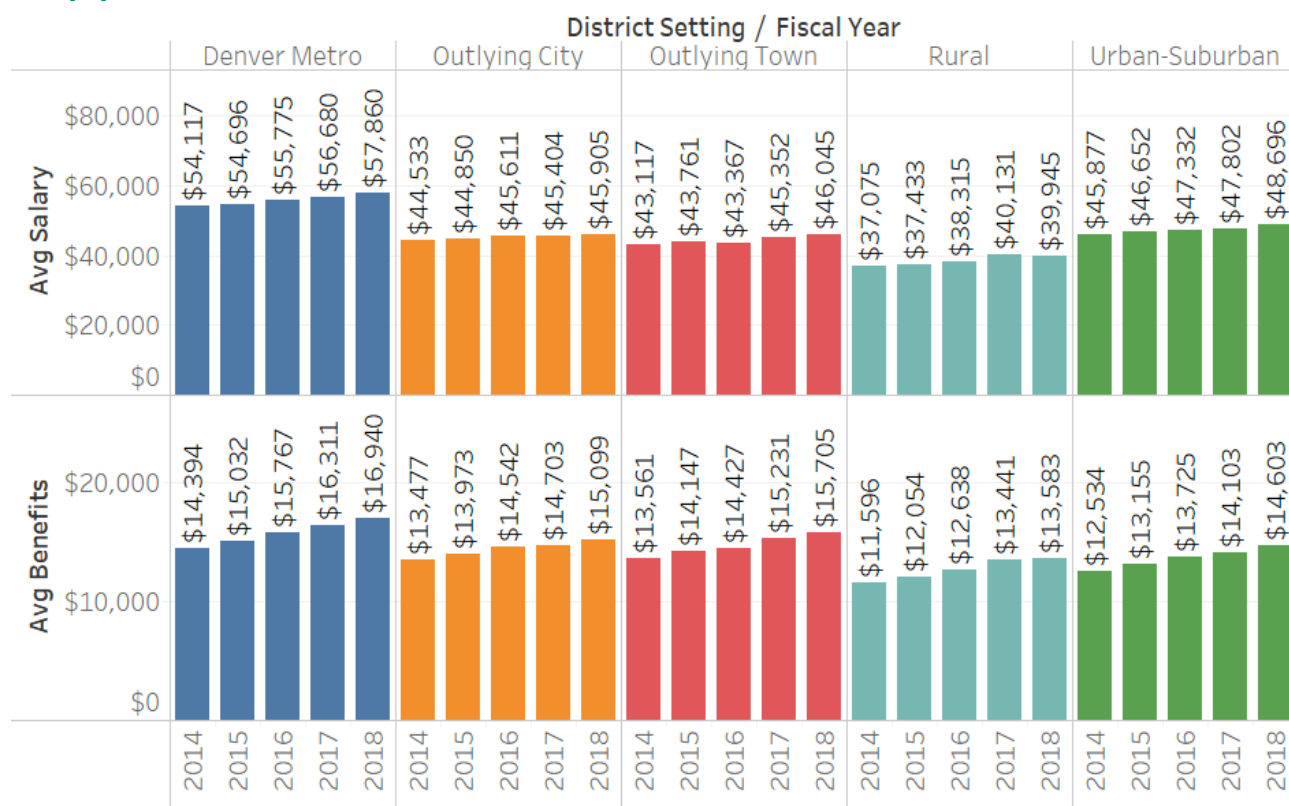
- **Teachers' Highest Education Level by District Setting, 2014 - 2018.**
- Highest advanced degrees in those districts included in the Denver Metro category and lowest in those districts included in the Rural category.

Principle 3: Provide Every Student Access to Quality Core Learning Opportunities



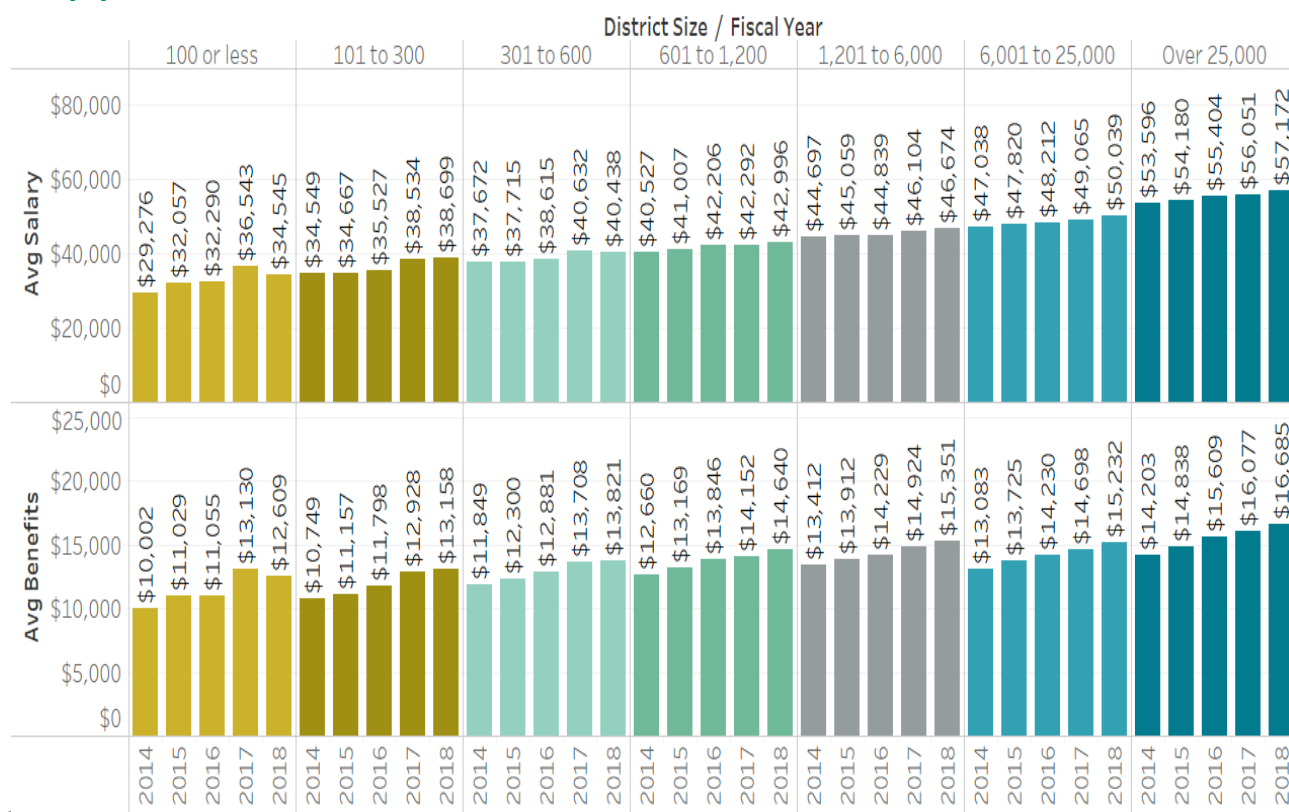
- **Average Teacher Salaries, 2018.**
- The average teacher salaries across Colorado districts range from \$29,356 (in the lightest green) to \$75,200 (in the darkest teal).
- Higher average salaries in the central part of the state.

Principle 3: Provide Every Student Access to Quality Core Learning Opportunities



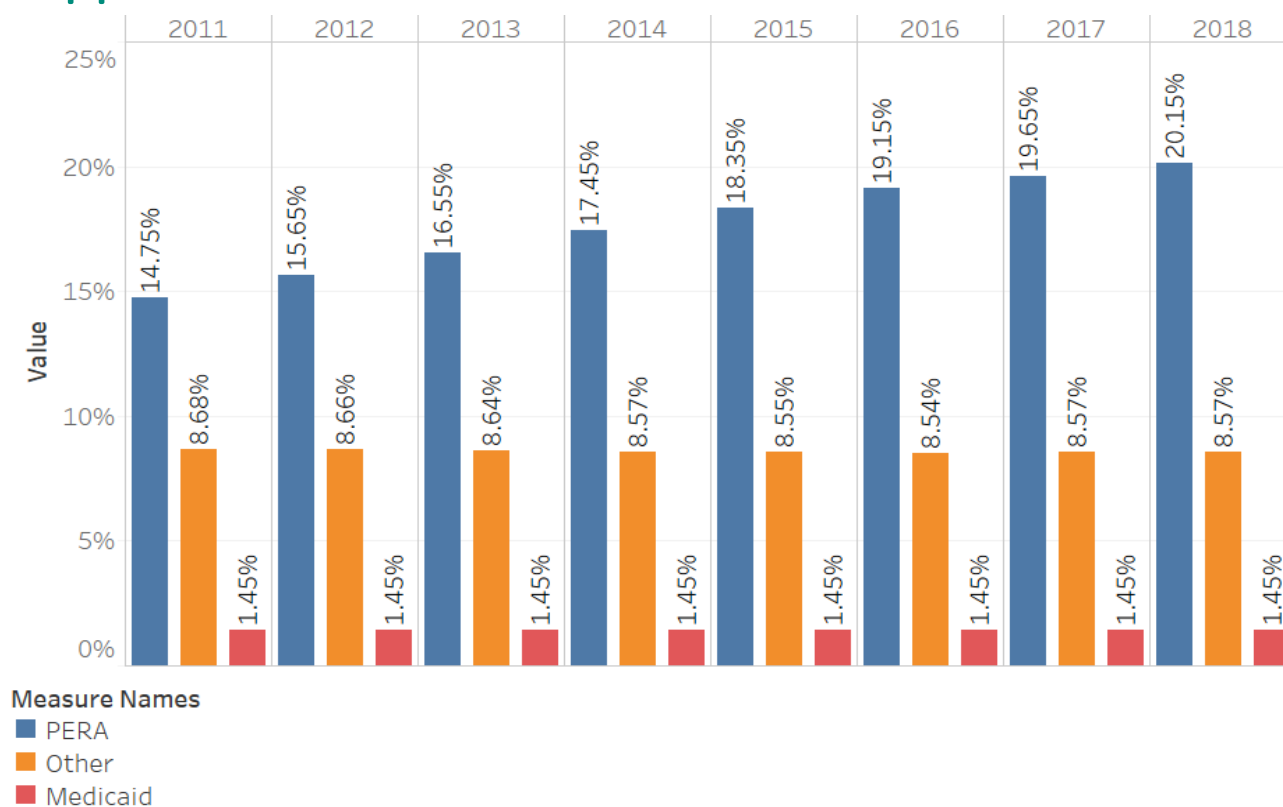
- **Average Teacher Salaries and Benefits by District Setting, 2014-2018.**
- Highest average teacher salaries in those districts included in the Denver Metro category and lowest in those districts included in the Rural category.
- Benefits increasing at a higher rate than salaries across all district settings.

Principle 3: Provide Every Student Access to Quality Core Learning Opportunities



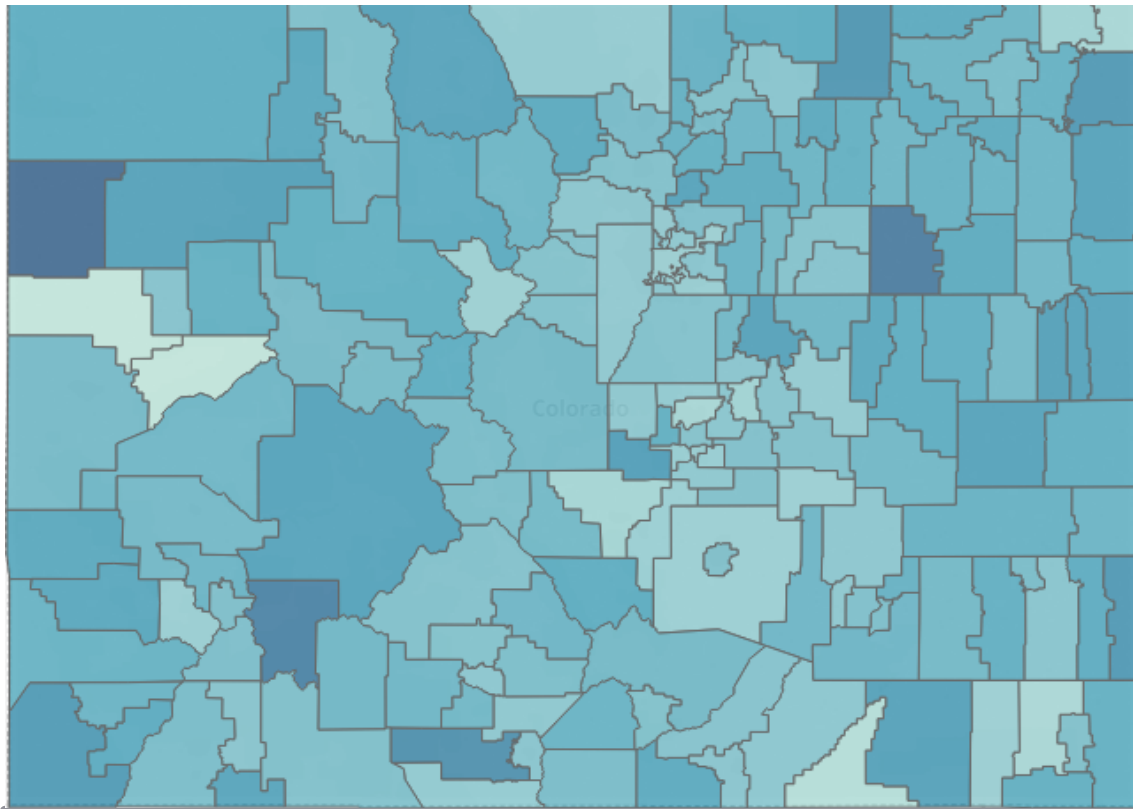
- **Average Teacher Salaries and Benefits by District Size, 2014-2018.**
- Lowest average teacher salaries in those districts included in the 100 or less category and highest in those districts included in the Over 25,000 category.
- Benefits increasing at a higher rate than salaries across all district sizes.

Principle 3: Provide Every Student Access to Quality Core Learning Opportunities



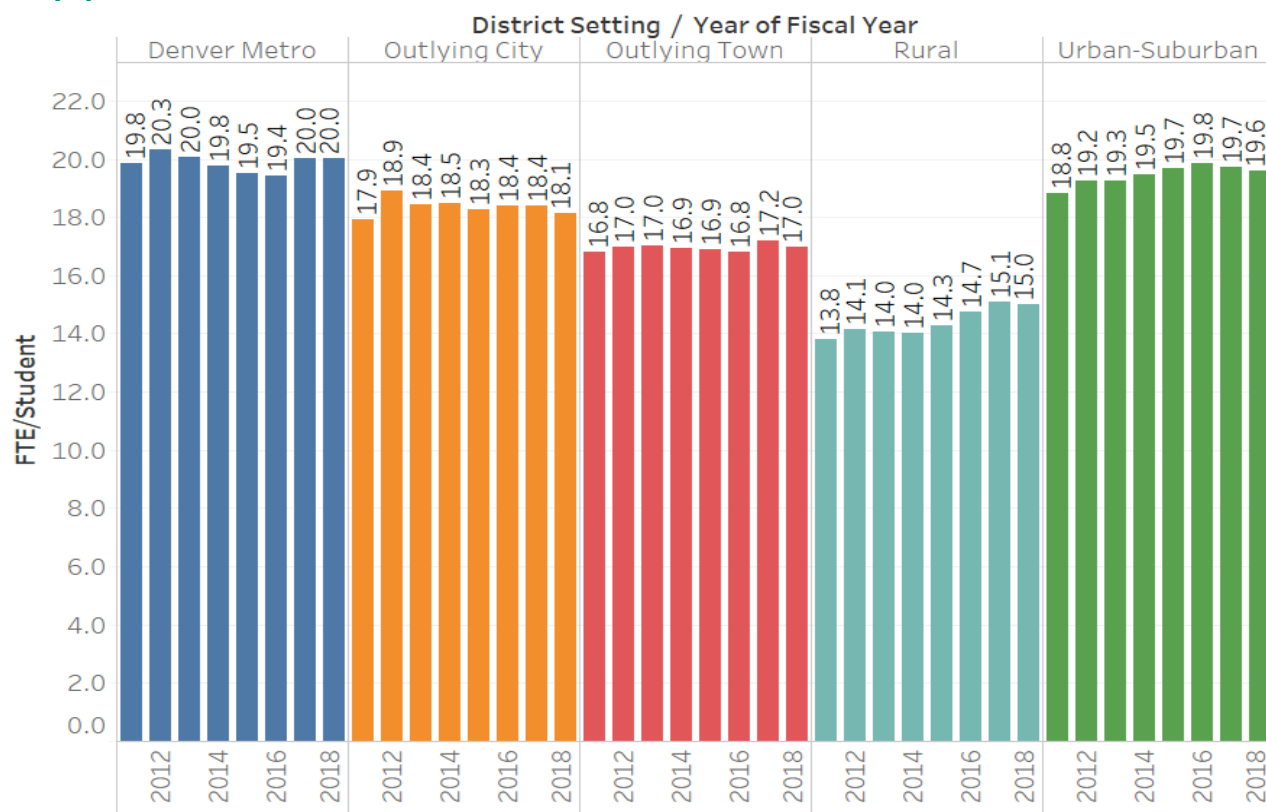
- **Teacher Benefits as Percentage of Salary by Benefit Type, 2011-2018.**
- “Other” benefits primarily identified as health, dental, vision.
- Teacher compensation increasing through increased PERA contributions.

Principle 3: Provide Every Student Access to Quality Core Learning Opportunities



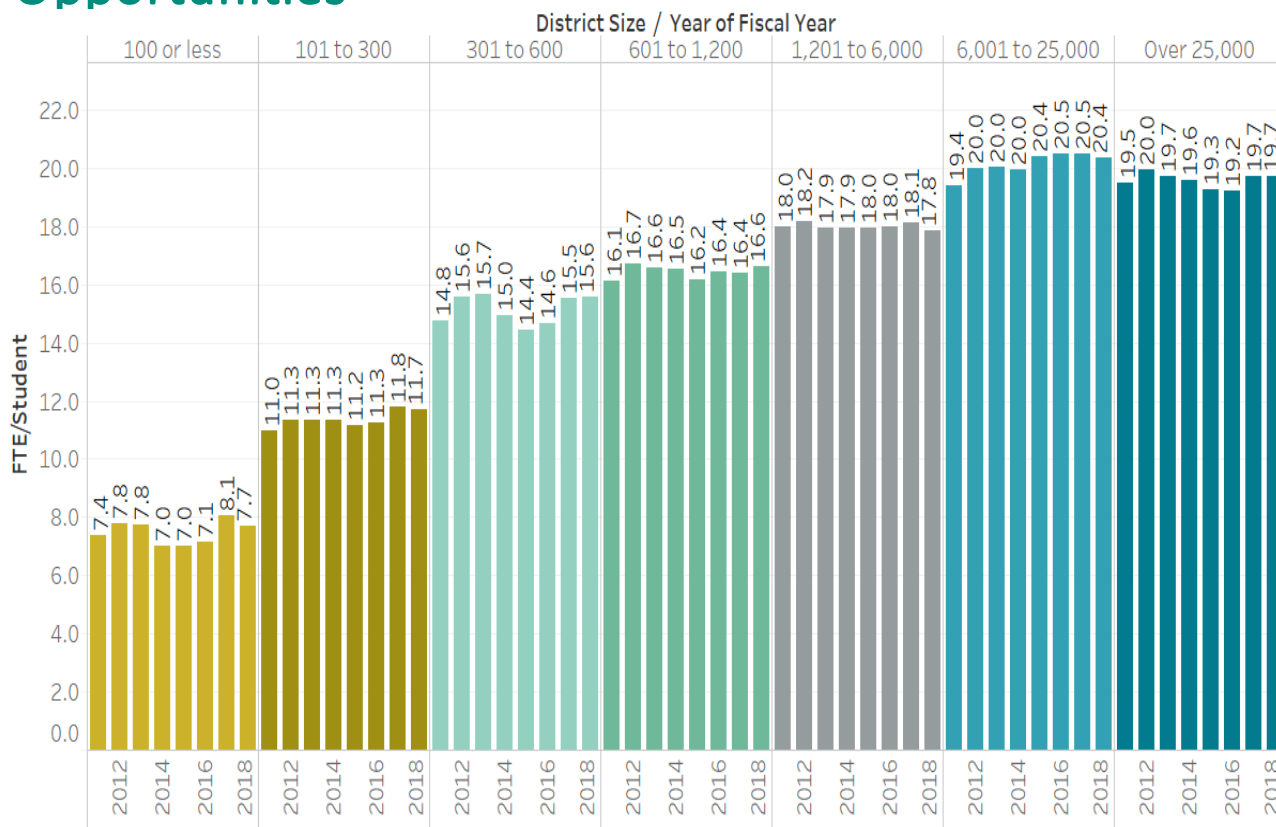
- **“Other” Benefits as a Percentage of Teacher Salary Across School Districts, 2018.**
- Ranges from 0.00% to 29.55% across districts.
- Statewide average is 8.57%.

Principle 3: Provide Every Student Access to Quality Core Learning Opportunities



- **Pupil-Teacher Ratios by District Setting 2011-2018.**
- Pupil-teacher ratios lowest in Rural district setting category.
- Ratios in Denver Metro district setting and Urban-Suburban district setting similar at approximately 20.0 students per teacher (regular).

Principle 3: Provide Every Student Access to Quality Core Learning Opportunities

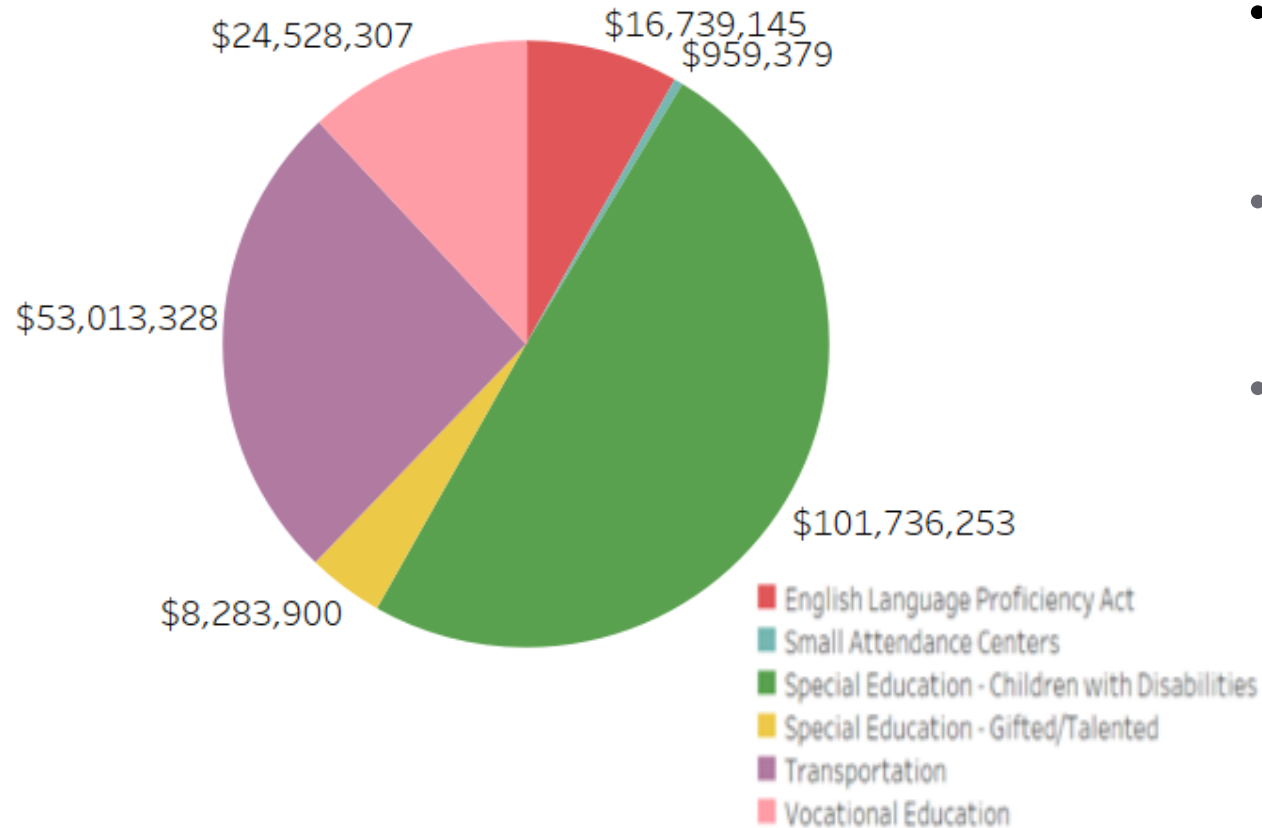


- **Pupil-Teacher Ratios by District Size, 2011-2018.**
- Districts with 6,000 students or more have greater ratios than districts with fewer students.
- Ratios in districts with 100 students or less and districts with 101 to 300 students significantly lower than other sized districts.

Principle 4: Provide Every Student Equitable Opportunities to Achieve

- State funding targeted to vulnerable students, e.g., students in poverty, English learners, homeless, special education, etc. through formula funding, categorical funding, and other grants and awards.
- Resource input measures such as pupil-staff ratios.
- Inclusion of federal funds to supplement (not supplant) state and local efforts to serve students.

Principle 4: Provide Every Student Equitable Opportunities to Achieve



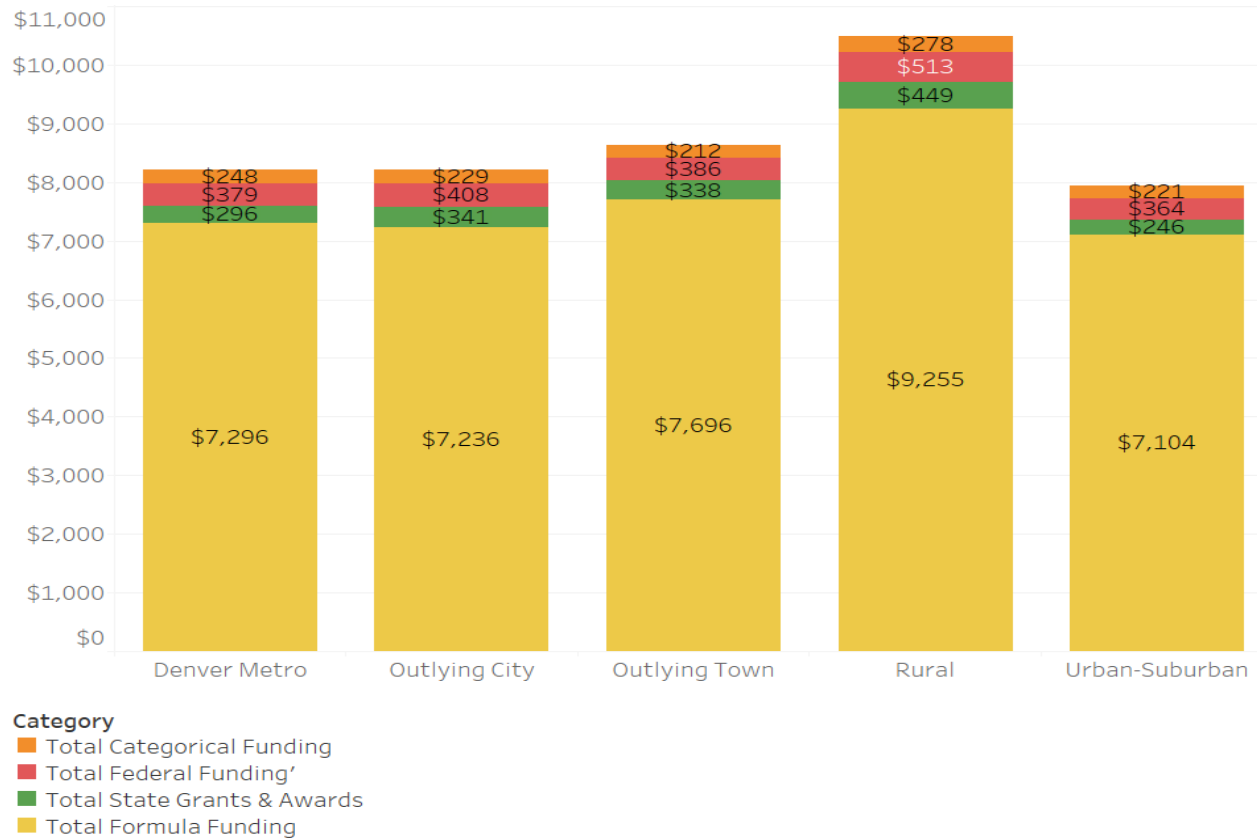
- **Categorical Program Funding, 2018.**
- Funding reached \$205 million in 2018.
- Reminder that At-Risk funding of \$347 million and Colorado Preschool Program (and ECARE expanding # of preschool lots and eligibility) are in Total Program Funding formula calculations.

Principle 4: Provide Every Student Equitable Opportunities to Achieve

Sample of State Grants, Competitive Grants, and Awards	Funding
READ Act 2012	\$33,047,438
Small Rural Schools Additional Funding	\$30,000,000
English Language Prof Development and Student Support Program	\$27,000,000
School Health Professional Grant Program	\$11,486,626
School Counselor Corps Grant Program (SCCGP)	\$9,627,400
Full Day Kindergarten Hold Harmless	\$8,144,181
Expelled and At-Risk Student Services (EARSS) Restorative Practices	\$8,057,710
Expelled and At-Risk Student Services	\$6,573,518
Additional At-Risk	\$4,998,960
Supplemental At-Risk Funding (Charter School Density)	\$4,578,823
Early Literacy Competitive Grant Program	\$4,000,000
School Bullying Prevention and Education Grant	\$2,093,026
Student Re-Engagement Grant	\$1,919,008
Gifted Education Universal Screening and Qualified Personnel Grant	\$1,773,173
Child Nutrition School Lunch Protection Program	\$1,474,221
Supplemental On-Line Funding	\$1,020,000
Career Success Pilot Program Incentives	\$1,000,001
Facility Schools	\$945,453
Start Smart Nutrition Program	\$941,685
Colorado Adult Education	\$850,000
Gifted Education Regional Consultants (GERCs)	\$660,000
English Language Proficiency Act Excellence Award	\$500,000
Computer Science Education Grant	\$440,000
Student Wellness Award	\$400,000
Advanced Placement Incentives Pilot Program	\$118,750

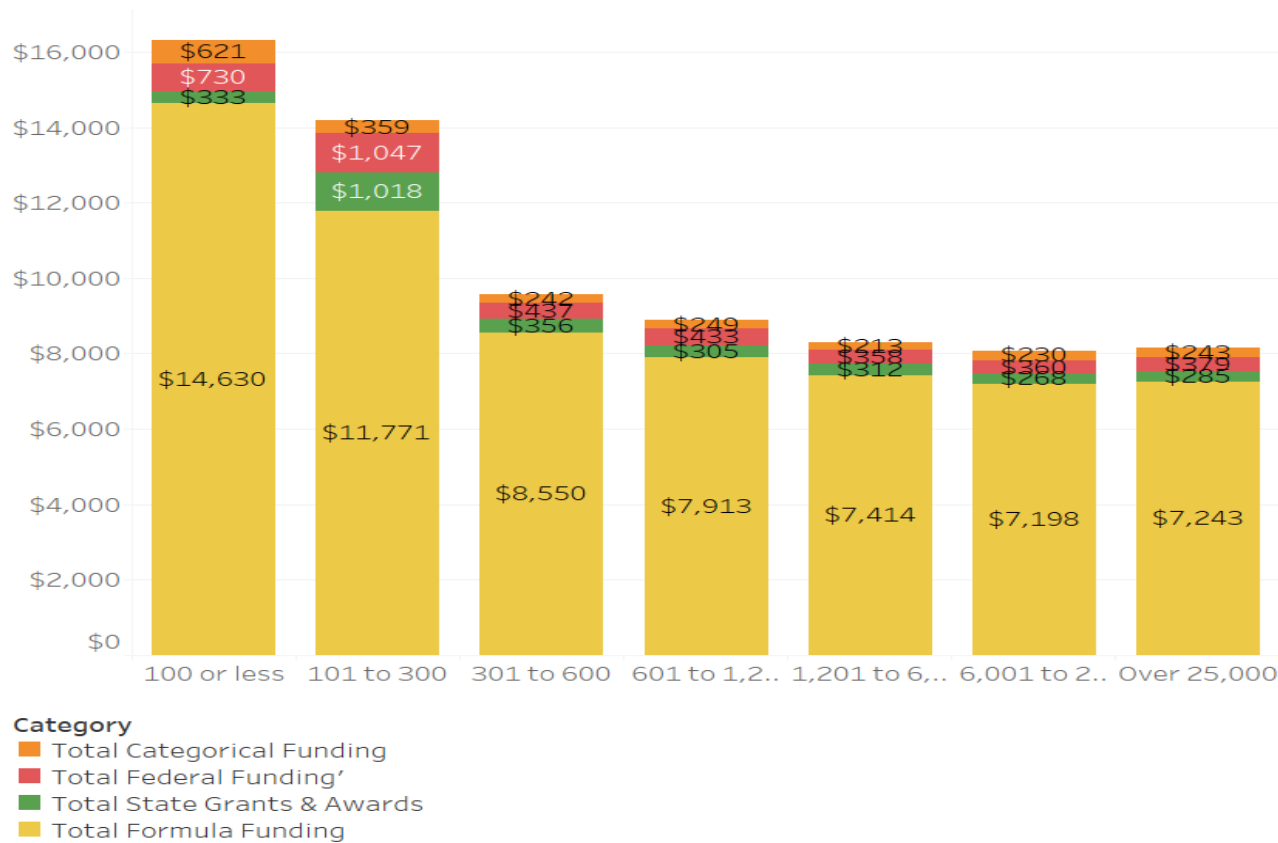
- **State Grants, Competitive Grants, and Awards, 2018.**
- Over 50 additional state funding streams to school districts, Charter School Institute, and BOCES.
- \$111 million allocated from the largest five grants and awards.

Principle 4: Provide Every Student Equitable Opportunities to Achieve



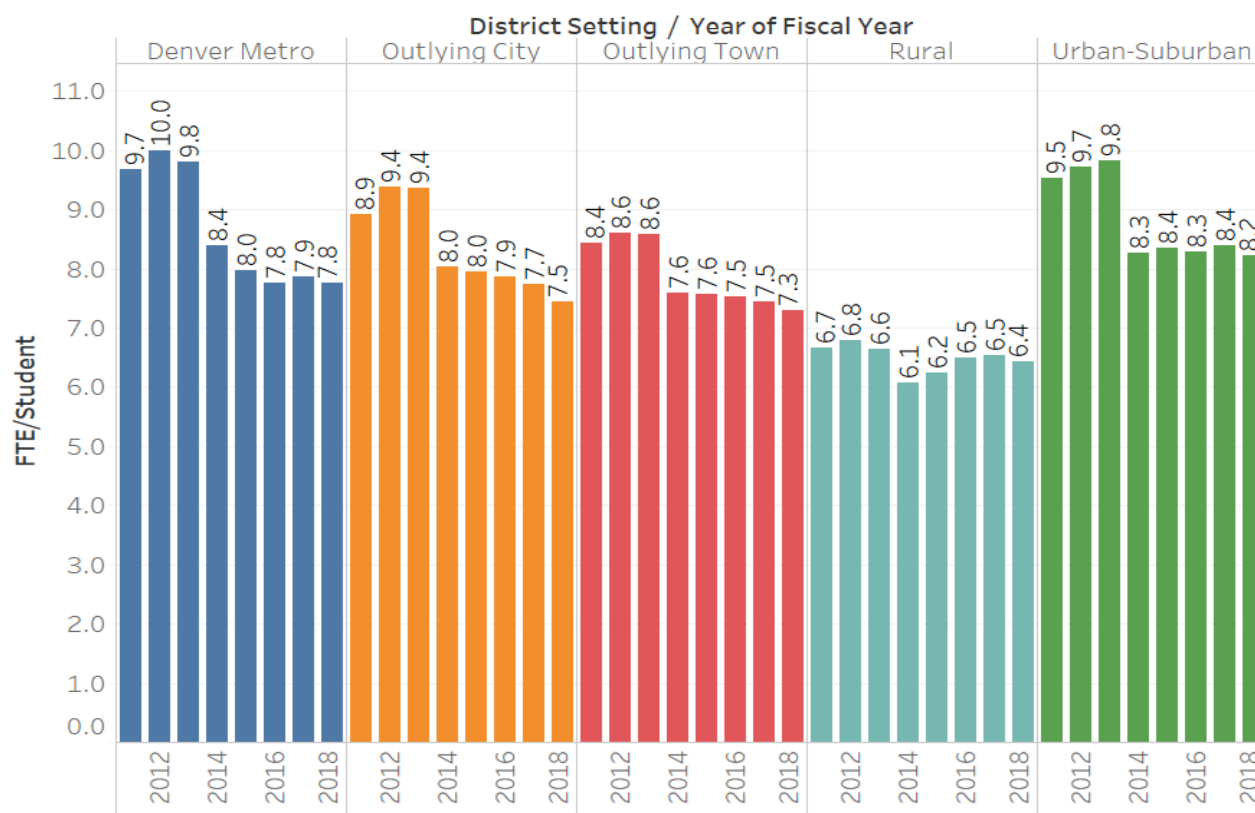
- **Per-Pupil Total Formula Funding, State Categorical Funding, State Grants & Awards Funding, and Federal Funding by District Setting, 2018.**
- At-risk funding included in Total Program Funding formula.
- Statewide categorical funding is between \$212 per pupil and \$248 per pupil across settings.

Principle 4: Provide Every Student Equitable Opportunities to Achieve



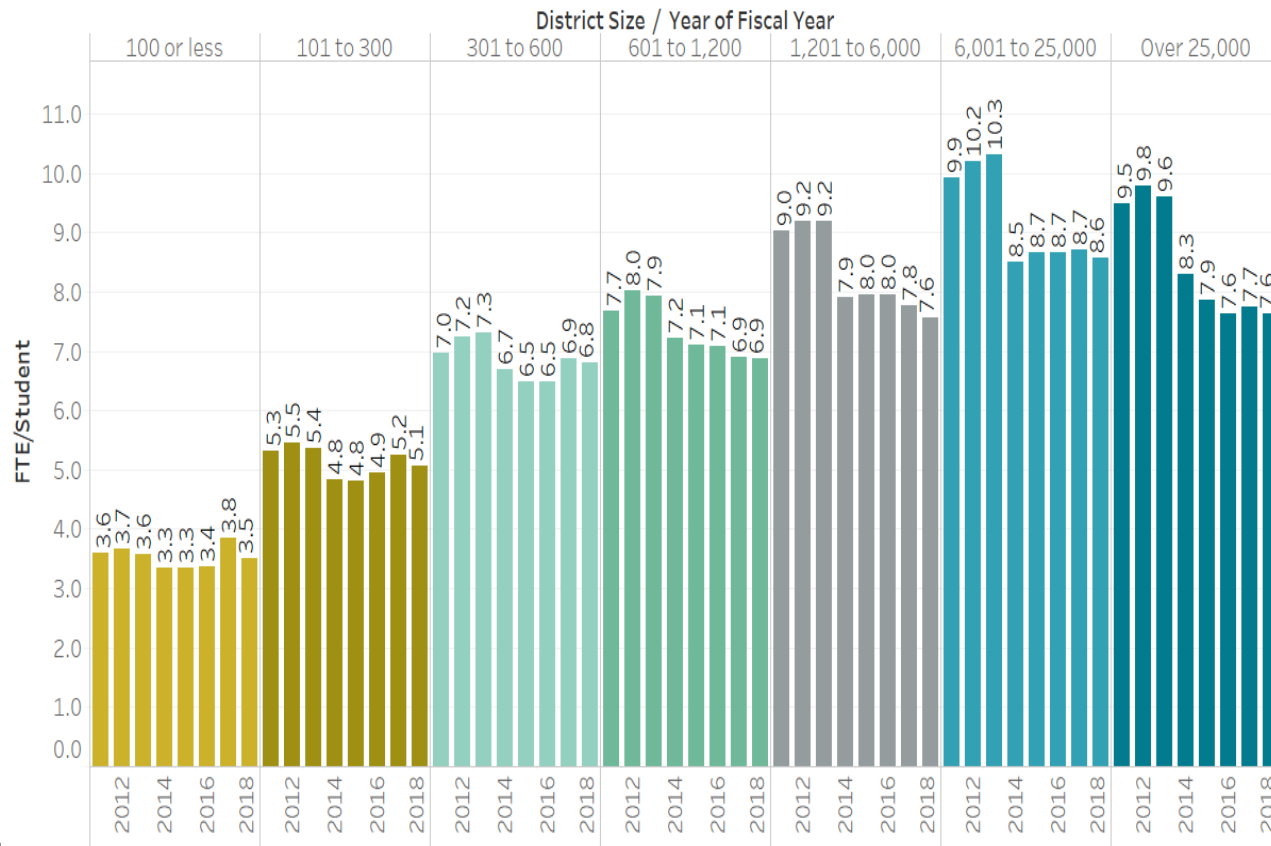
- **Per-Pupil Total Formula Funding, State Categorical Funding, State Grants & Awards Funding, and Federal Funding by District Size, 2018.**
- The smallest districts in the state receive more categorical funding and federal funding per pupil than other sized districts.
- Districts with between 101 and 300 students receive more than \$1,000 per pupil in other state grants and awards.

Principle 4: Provide Every Student Equitable Opportunities to Achieve



- **Pupil-Staff Ratios by District Setting, 2011-2018.**
- Staffing ratios decline across all district settings between 2013 and 2014. Might be a result of a change in data collections.
- Staffing ratios similar across 4 of 5 district settings; Rural district setting is lowest.

Principle 4: Provide Every Student Equitable Opportunities to Achieve



- **Pupil-Staff Ratios by District Size, 2011-2018.**
- There is approximately 3.5 students per staff member in districts with 100 students or less.
- Changes in Pupil-Staff Ratios appear in most district size categories between 2013 and 2014.

Principle 4: Provide Every Student Equitable Opportunities to Achieve

FEDERAL FUNDS TO SUPPLEMENT STATE AND LOCAL EFFORTS

Every Student Succeeds Act (ESSA)

- Title I, Part A -- \$140,227,954
- Title II, Part A -- \$21,741,951
- Title III -- \$8,419,035
- Title III, Set-aside immigrant -- \$467,725
- Title IV, Part A -- \$3,755,914

Source: http://www.cde.state.co.us/cdefisgrant/essa_prelim

Individuals with Disabilities Education Act (IDEA)

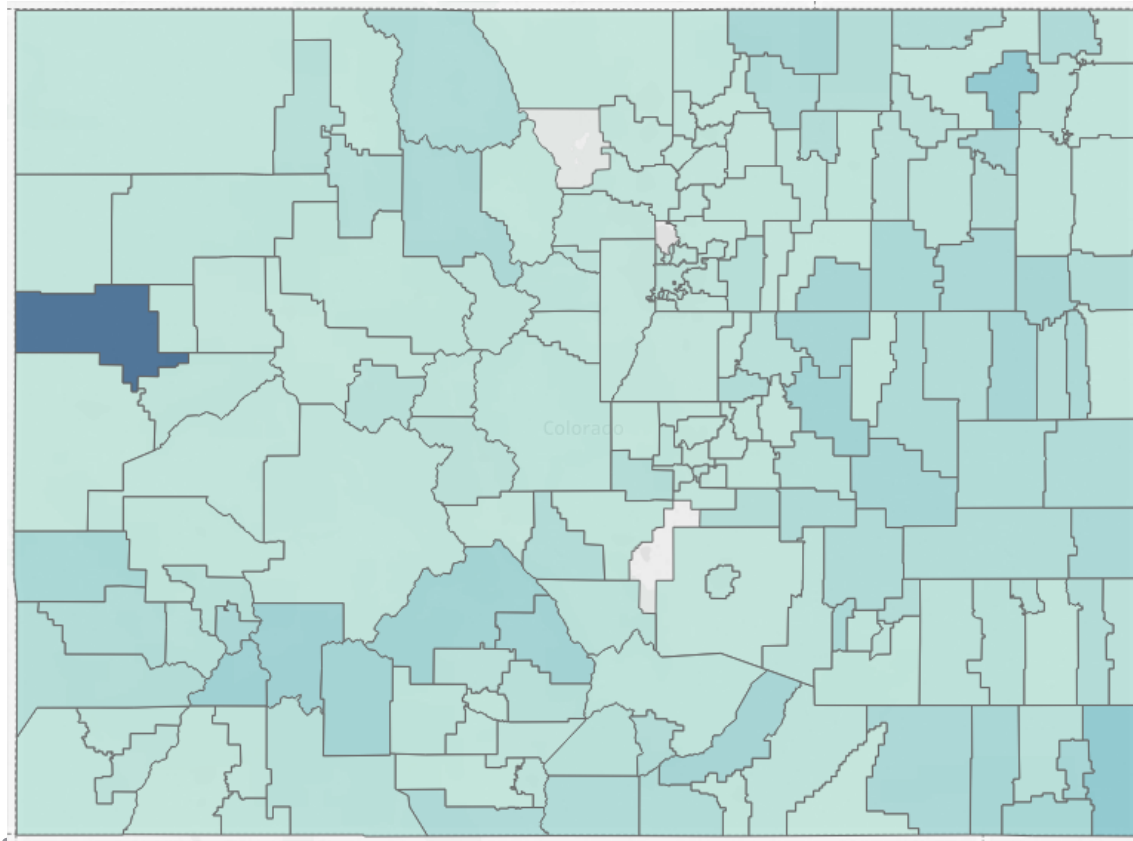
- IDEA, Part B -- \$145,985,528
- IDEA, Preschool -- \$3,519,254

Source: <http://www.cde.state.co.us/cdefisgrant/idea-part-b-fy2017-18-preliminary-allocations-pdf>; <http://www.cde.state.co.us/cdefisgrant/idea-fy2016-17-part-b-preliminary-allocations-pdf>

Perkins IV (career and technical education)

- \$6,201,750

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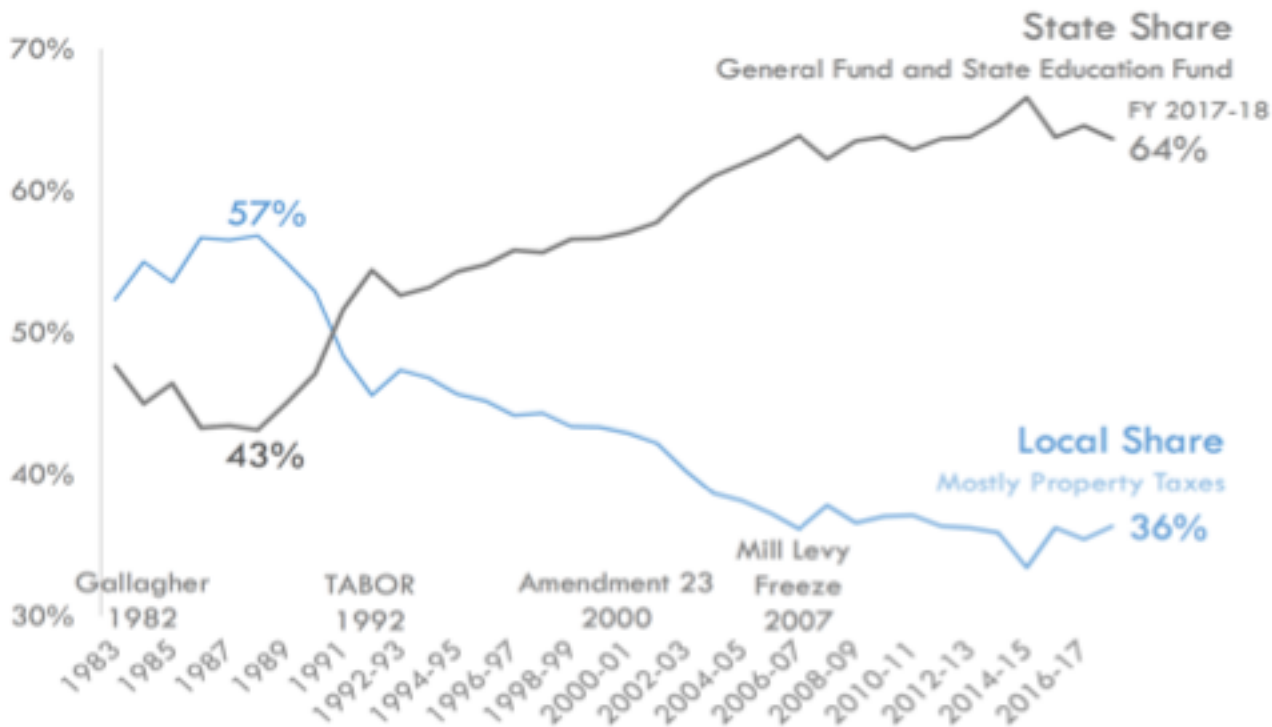


FourPoint Education Partners

Amount pp
\$7,364 68K

- **State, Local, and Federal Funding Per Pupil, 2018.**
- De Beque School District 49-JT is highest as a result of state and federal special education funding.

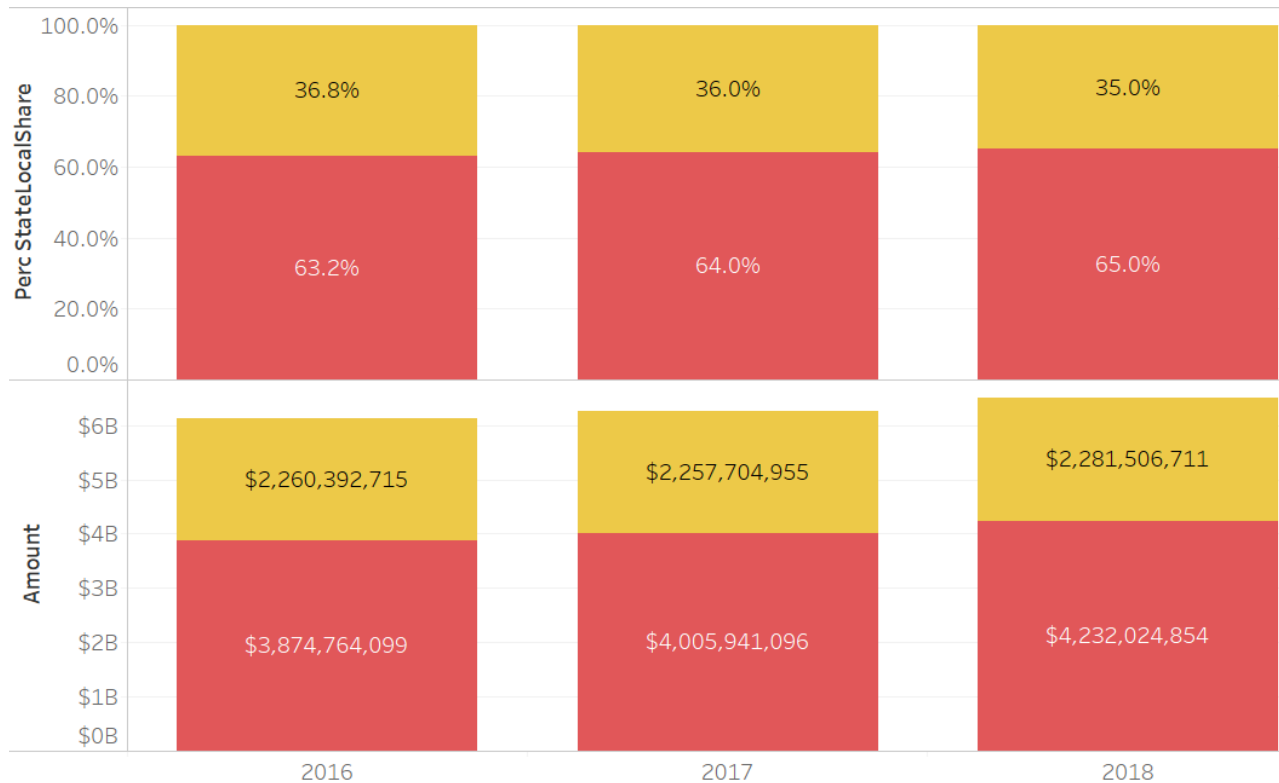
Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



Note: Prior to 1993, K-12 funding was allocated on a calendar year basis.

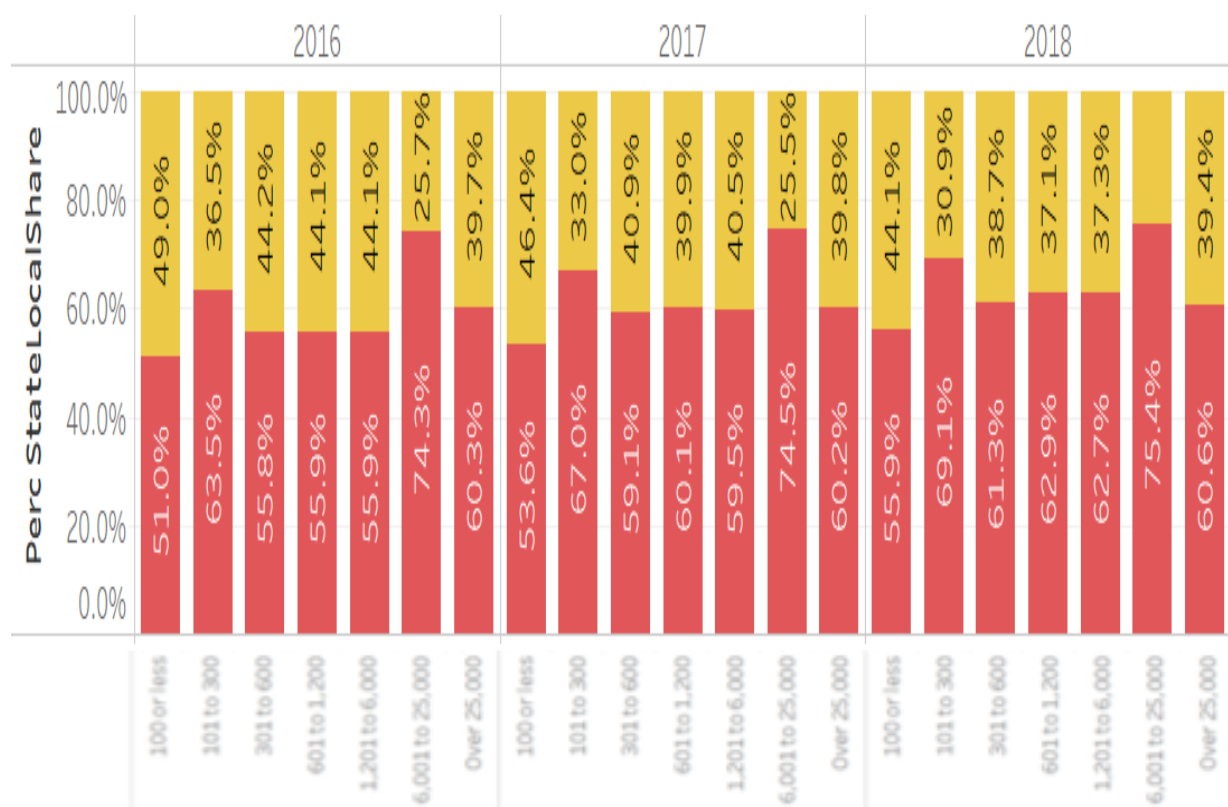
- Percent of State and Local Revenues Fiscal Years 1983 to 2017 towards Total Program Funding.
- State share began increasing in the late 1980s and became the larger share of Total Program Funding in the early 1990s.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



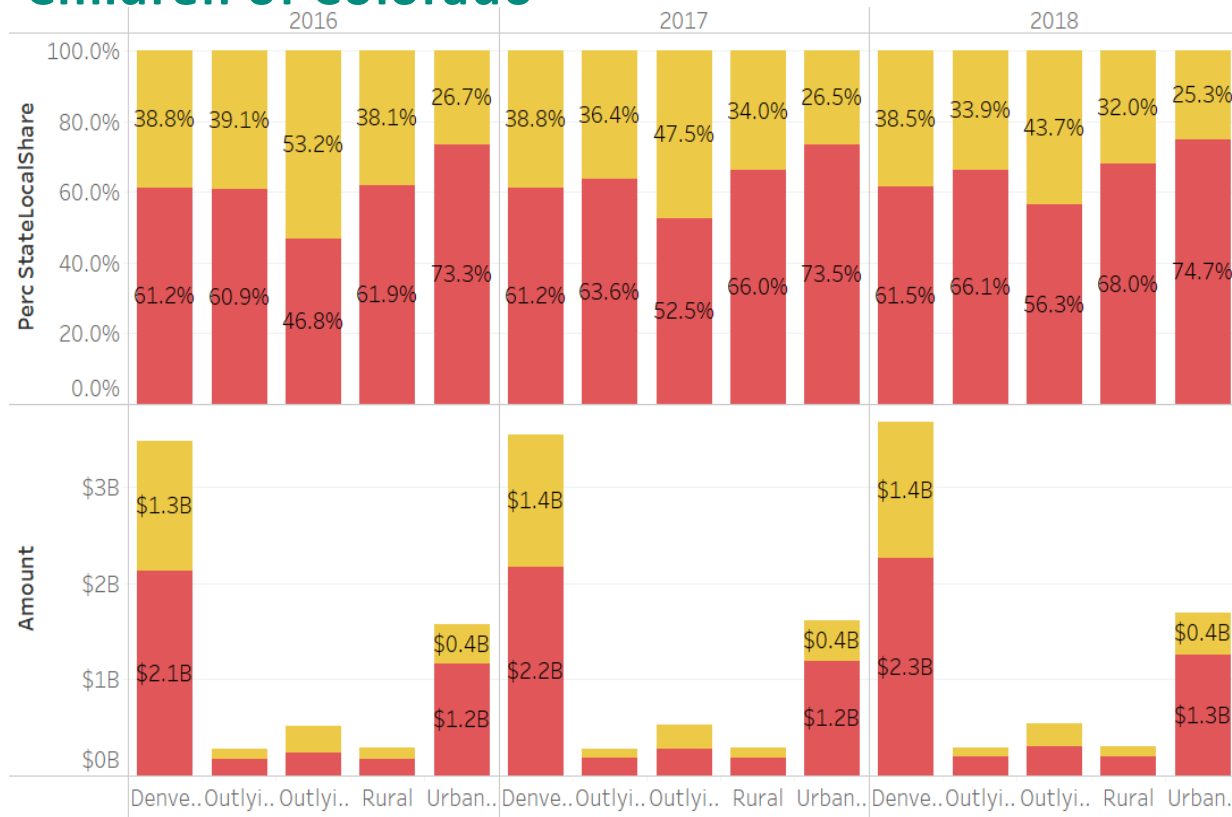
- **State and Local Share of Total Program Funding, 2016-2018.**
- State share of Total Program Funding is consistently above 60%.
- More than \$4.2 billion in state share of Total Program Funding formula levels.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



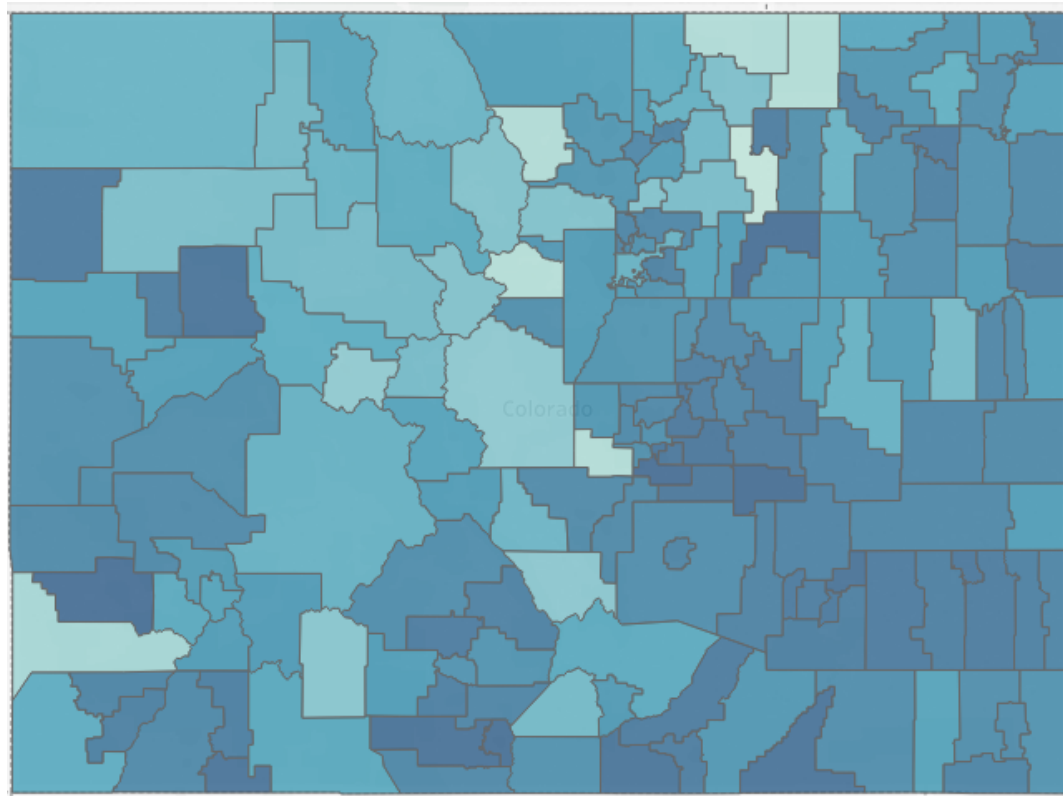
- **State and Local Share of Total Program Funding by District Size, 2016-2018.**
- Districts with 6,001 to 25,000 students have state share being nearly three-quarters of Total Program Funding.
- \$2.2 billion of \$4.2 billion in state share would go to districts with more than 25,000 students.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



- **State and Local Share of Total Program Funding by District Setting, 2016-2018.**
- Other Urban-Suburban districts have largest state share of Total Program Funding.
- Rural districts have increasing state share of Total Program Funding to 68.0% in 2018 from 61.9% in 2016.

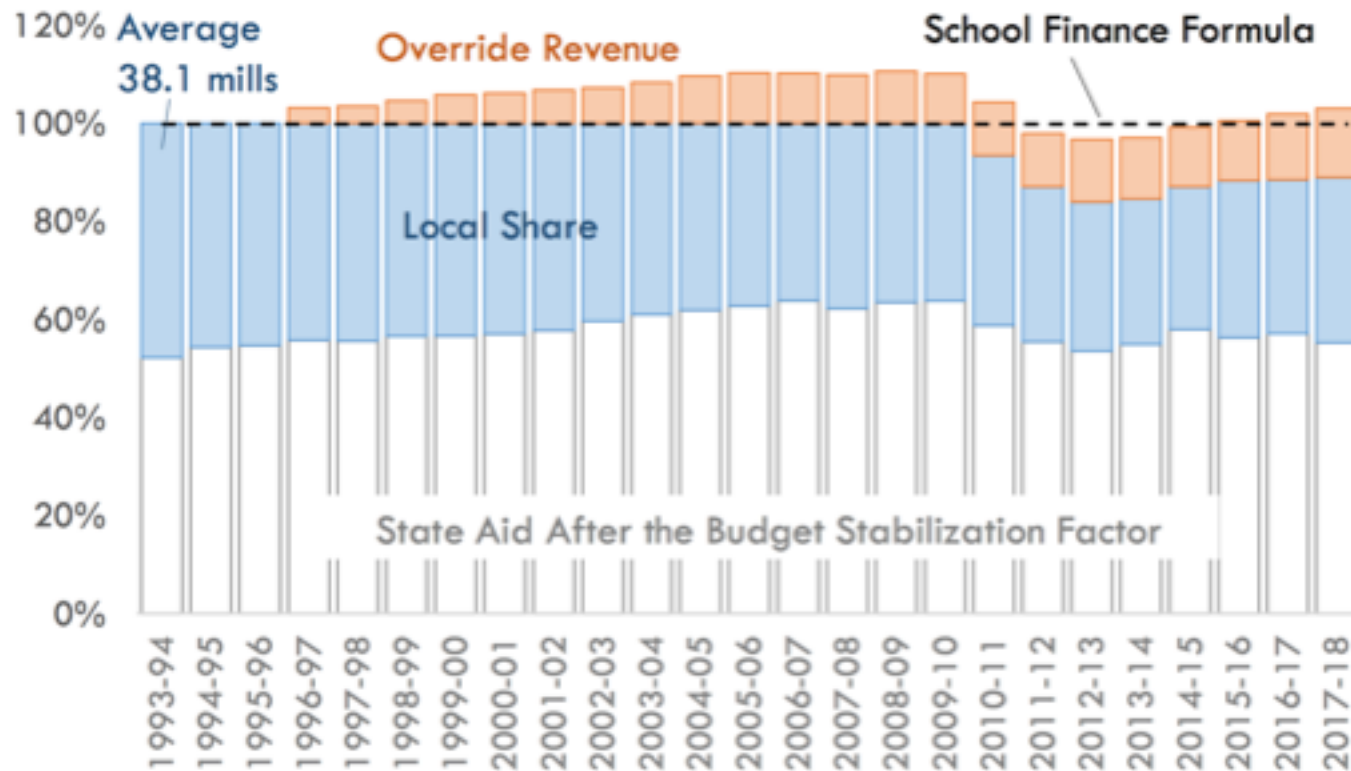
Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



Percent
0.96% 94.71%

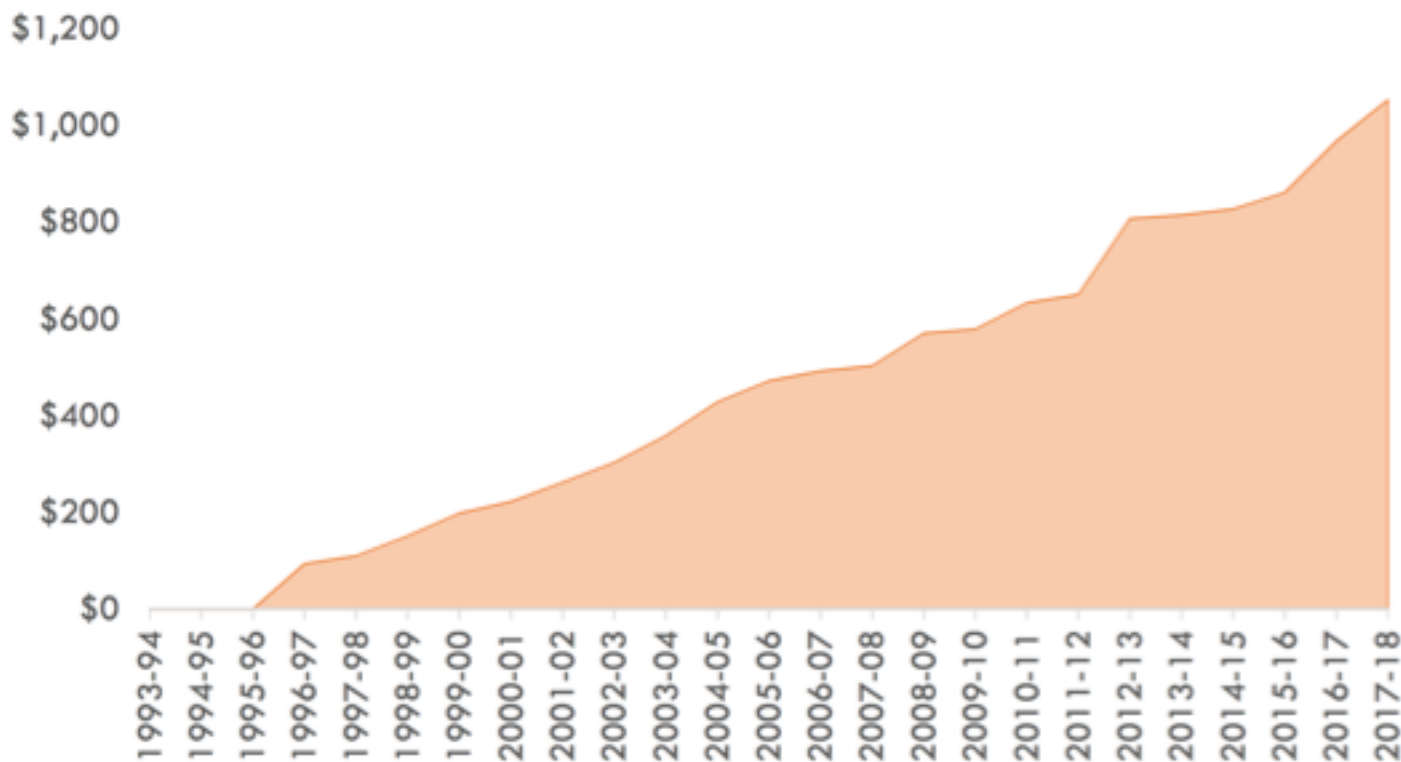
- **State Share of Total Program Funding, 2018.**
- State share of Total Program Funding varies tremendously across districts from nearly no share of revenues to providing nearly all revenues.
- Higher state shares in the eastern, southern, and western parts of the state, on average.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



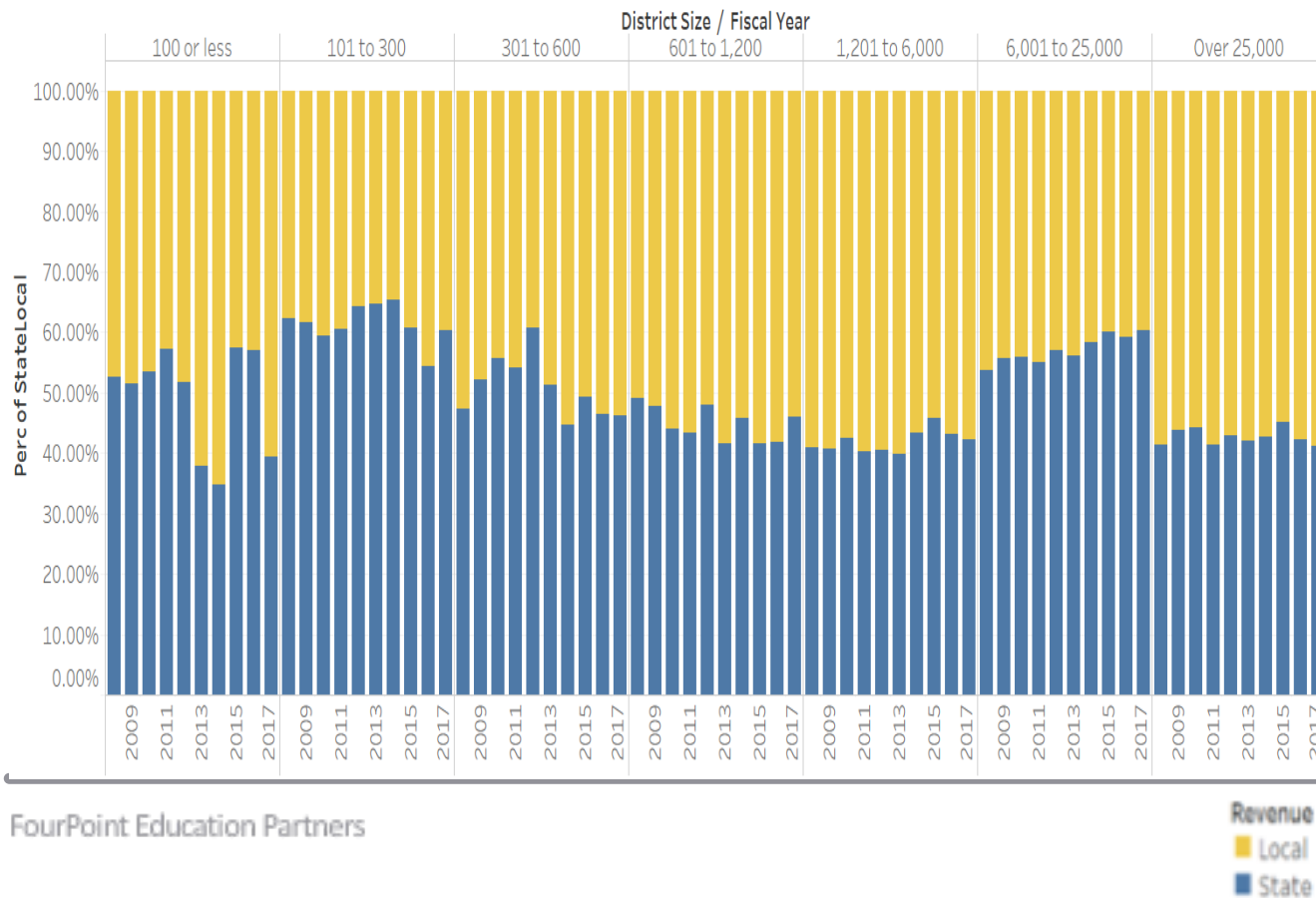
- **Statewide Funding as a Share of Total Program Funding, 1994-2018.**
- State Budget Stabilization Factor reduces state share of Total Program Funding.
- Local share has decreased from an average of 38.1 mills in 1994 to 19.7 mills in 2018.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



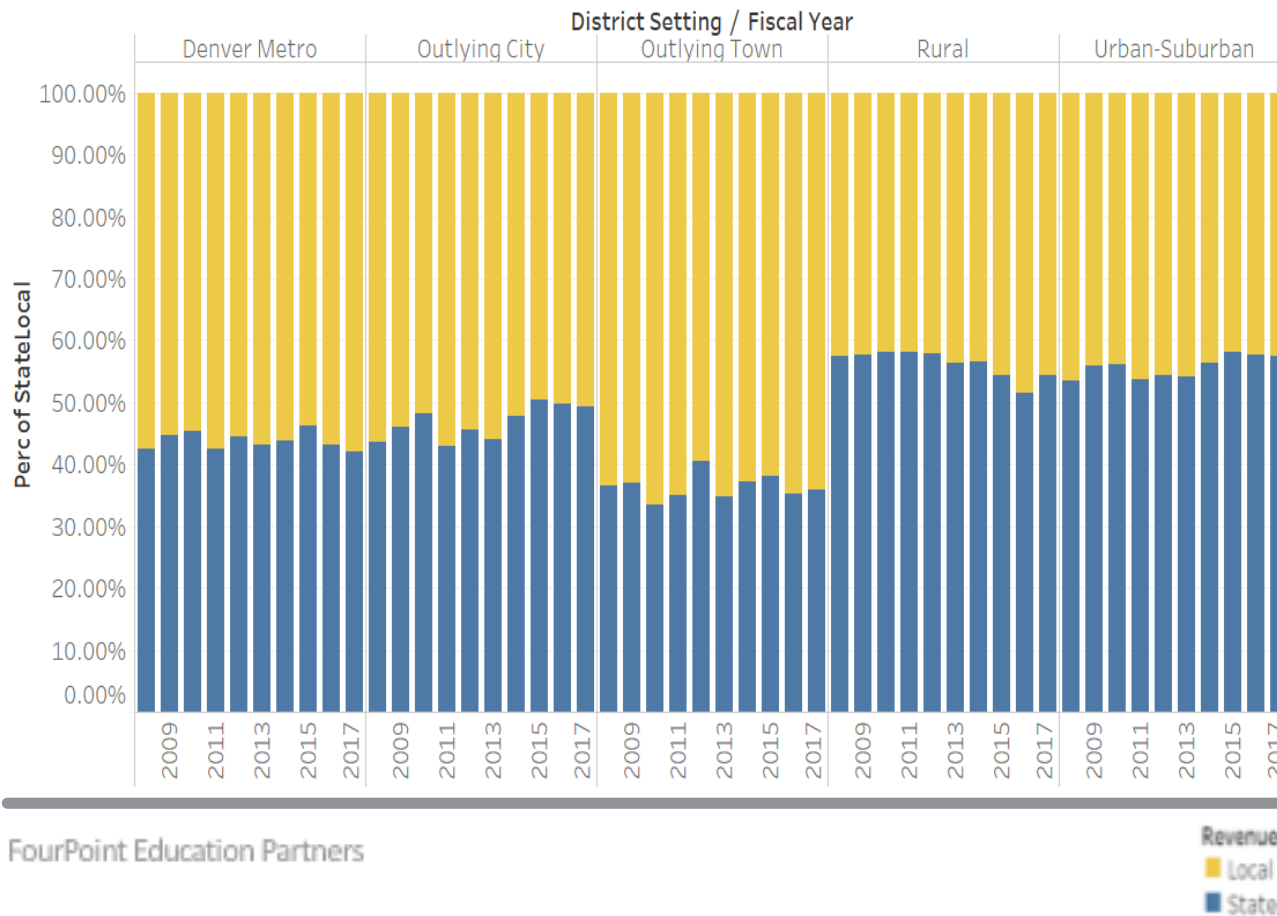
- **Statewide Mill Levy Override Revenues, 1994-2018 (in millions of dollars).**
- Increasing revenues from locally voted mill levy overrides beyond Total Program Funding (after Budget Stabilization Factor), categorical program funding, and state grants and awards.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



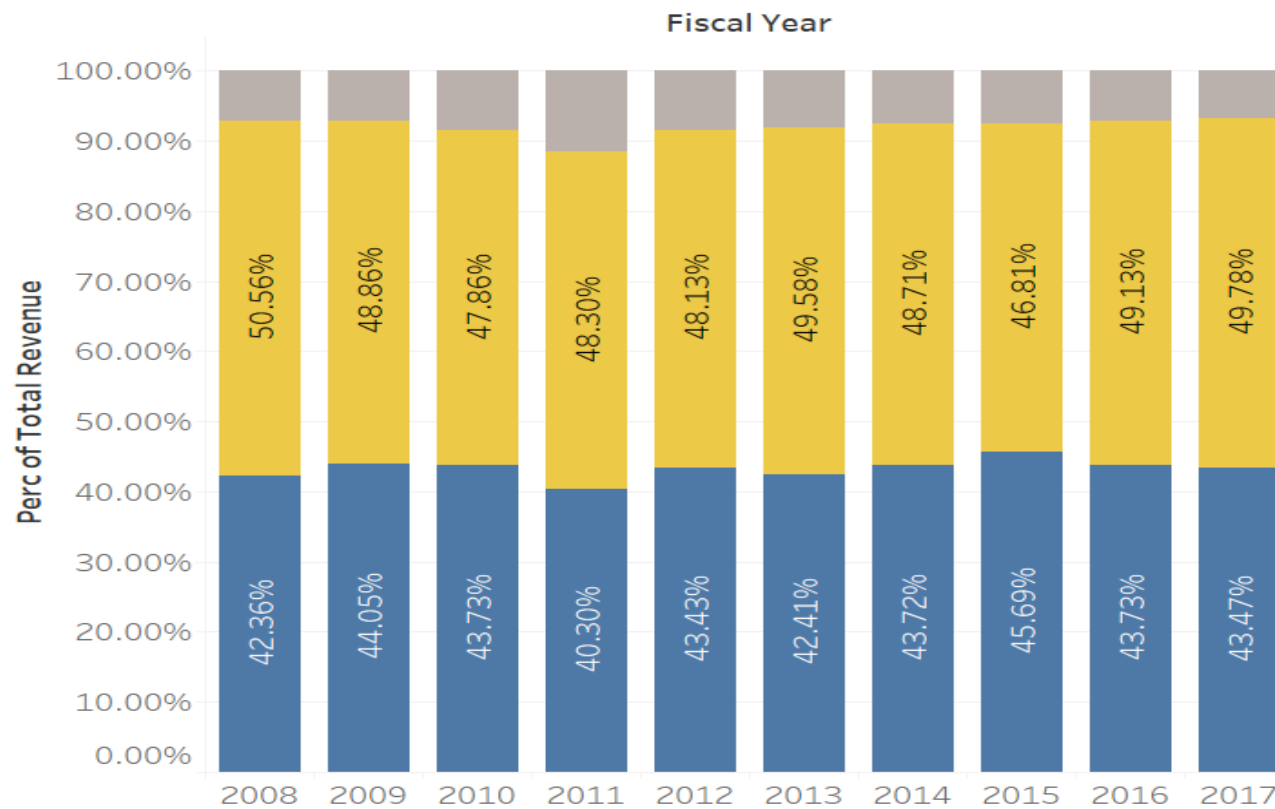
- **Percent of State and Local Revenues from All Sources by District Size, 2008-2017.**
- State contributes more than 50% of operational revenues in school districts with between 101 and 300 students and between 6,001 and 25,000 students.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



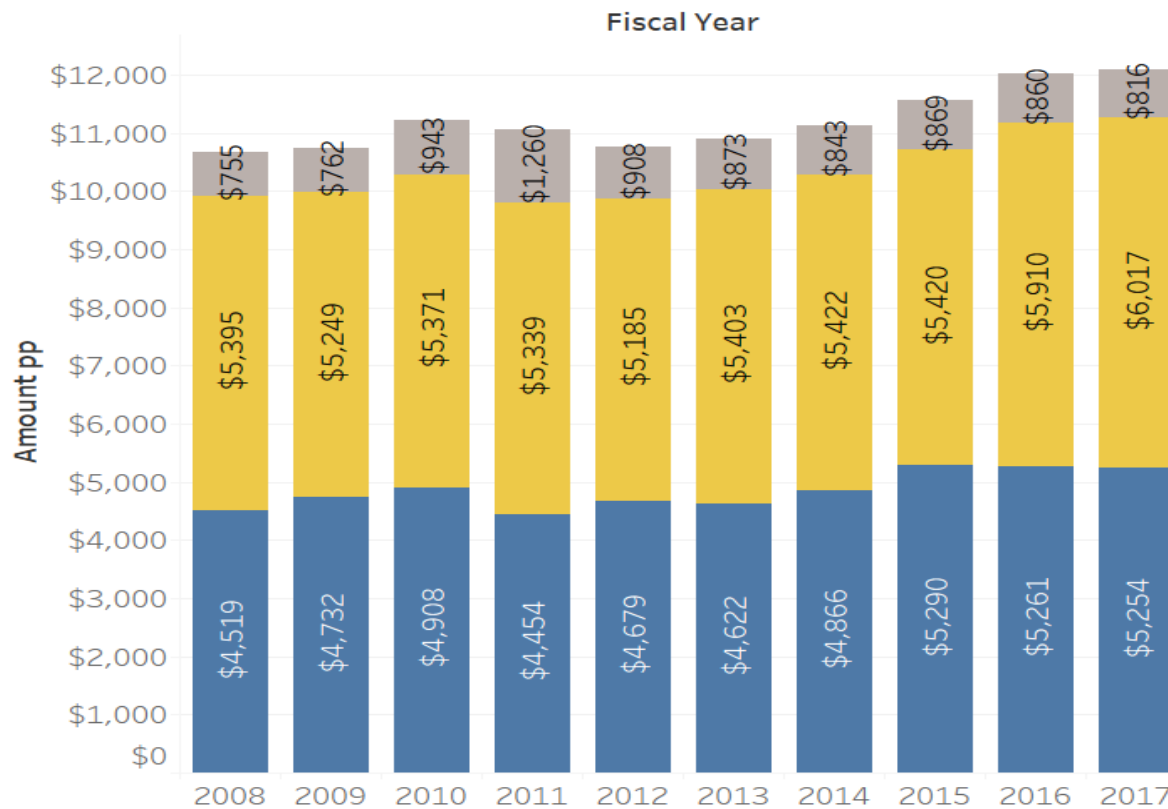
- **Percent of State and Local Revenues from All Sources by District Setting, 2008-2017.**
- Districts in Rural and Urban-Suburban settings have state shares exceeding 50% over time.
- Outlying Town districts have the lowest state share.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



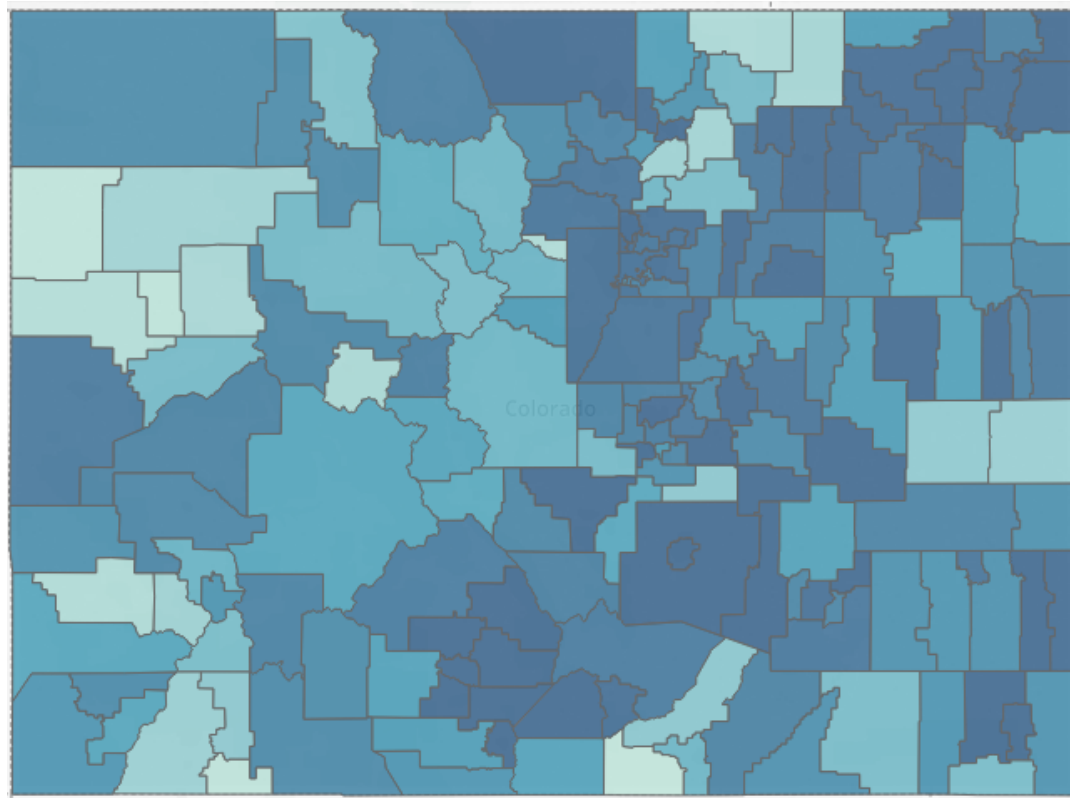
- **Percent of Revenues by All Sources, 2008 to 2017.**
- Local share of total school district revenues includes locally voted mill levy overrides.
- Local revenues, statewide, accounted for nearly 50% of total school district operating revenues over the last 10 years.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



- Revenues by All Sources, 2008 to 2017.
- Local revenues per pupil increased 11.5% between 2008 and 2017.
- State revenues per pupil increased 16.3% between 2008 and 2017.

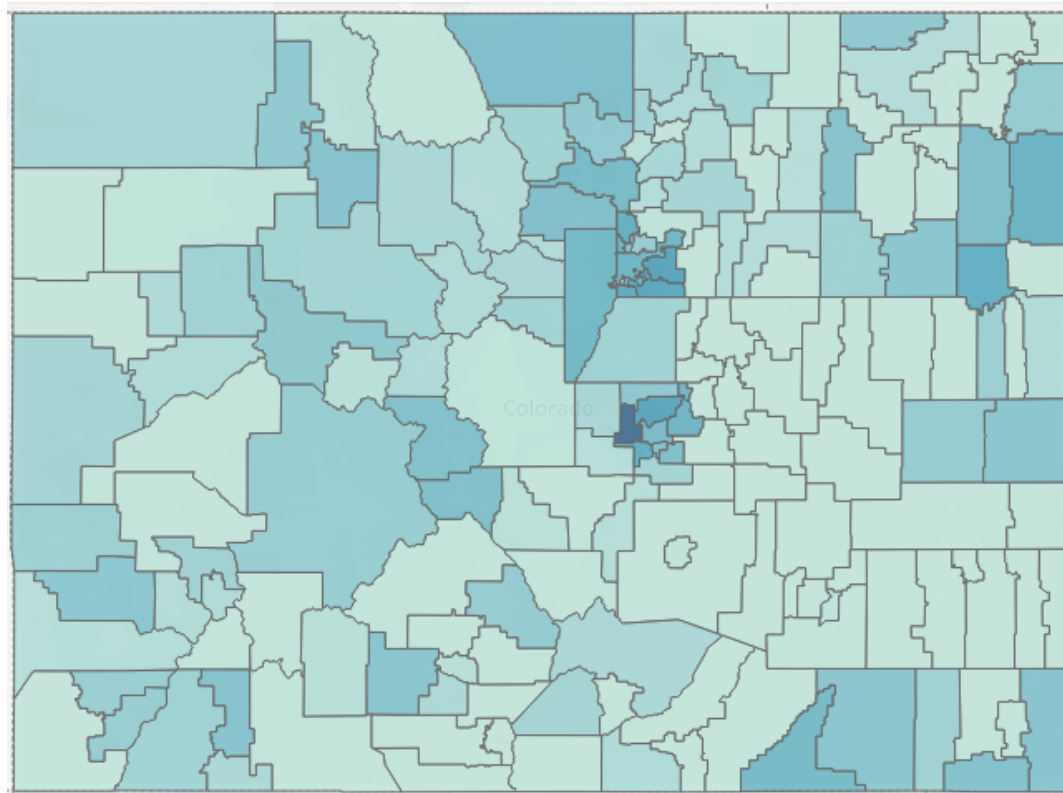
Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



Amount
1.68 27.00

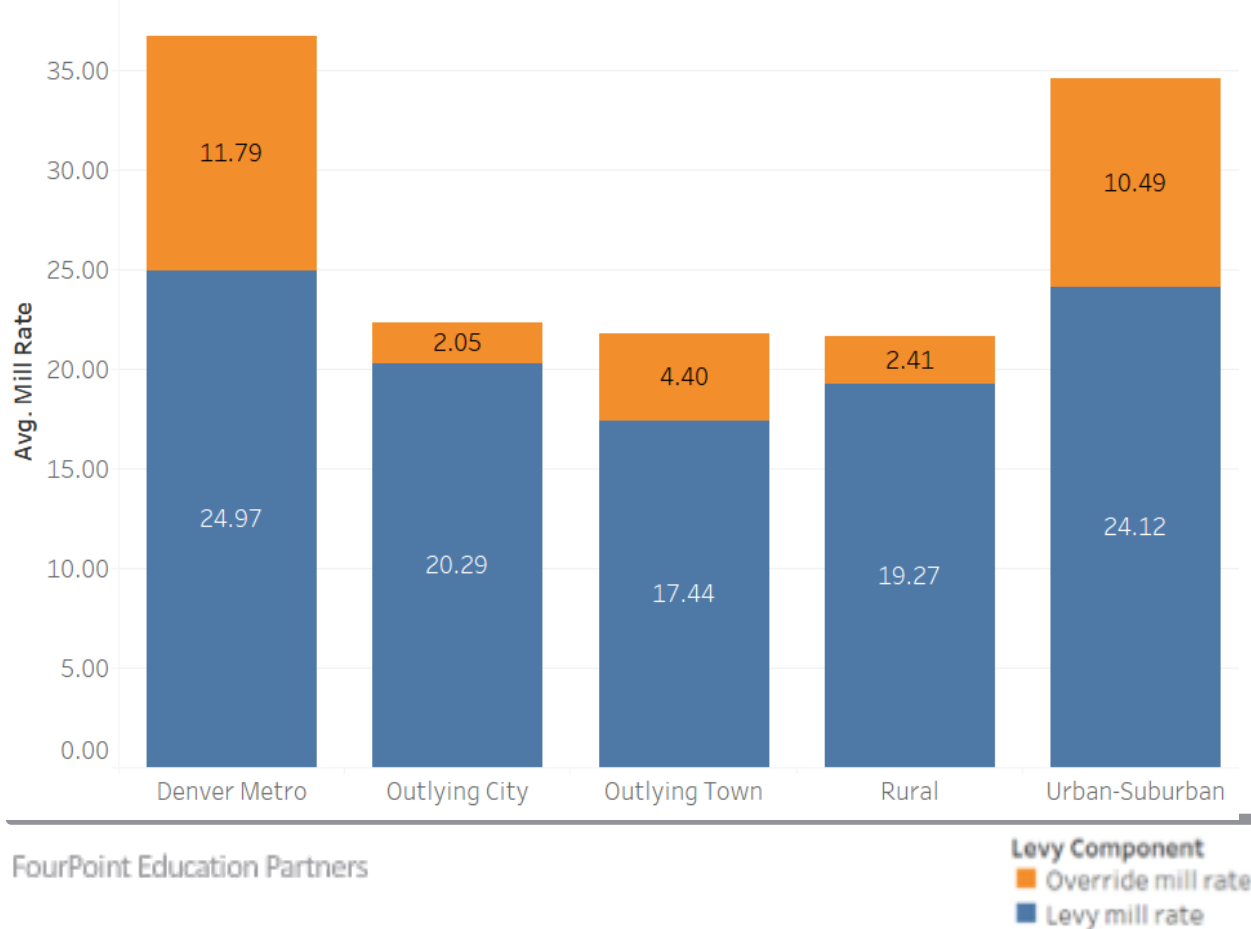
- **District Total Program Mill Levy Rate, 2018.**
- Total Program Mill Levy rates are capped at 27.00 (SB 07-199).
- Average 19.705 mills across the state; median is 21.72 mills.
- 39 districts at the 27.00 mill cap.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



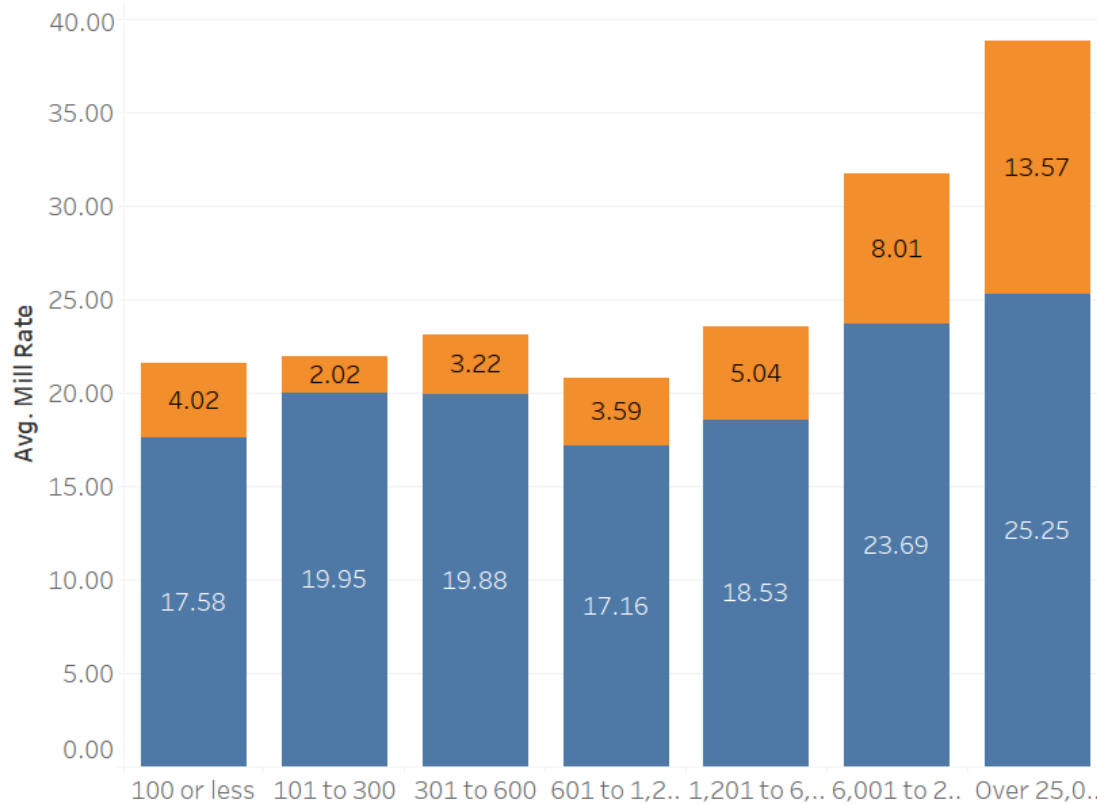
- **Voter Approved Mill Levy Override, 2018.**
- 66 districts have no voter approved mill levy overrides.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



- **Average Total Program Mills and Voter Approved Mill Override Rates by District Setting, 2018.**
- Total Program Mill Levy rate averages and Voter Approved Mill Levy Override averages highest in Denver Metro and Urban-Suburban setting districts.
- Outlying Town setting districts have lowest Total Program Mill Levy average.

Principle 5: Share Investment in Providing Learning Opportunities to Children of Colorado



- **Average Total Program Mills and Voter Approved Mill Override Rates by District Setting, 2018.**
- Total Program Funding Mills averages lowest in districts with 100 students or fewer and with between 601 and 1,200 students.
- As districts get larger, on average, the more voters approve mill levy overrides.

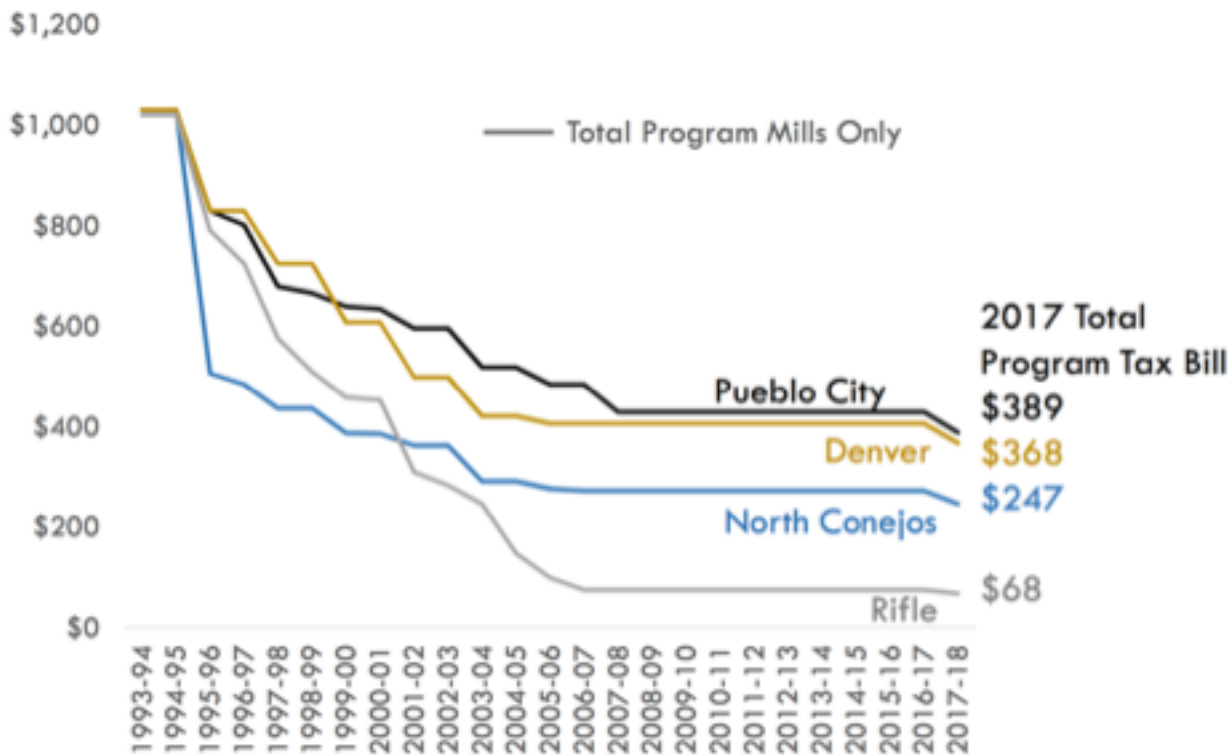
Principle 6: Make the School Finance and Funding System Transparent and Understandable to Stakeholders

- The Legislative Council Staff annually publishes “School Finance in Colorado” with the purpose of helping readers understand how Colorado finances its public elementary and secondary schools through the description of the formulas and other mechanics of the Colorado school finance and funding system (<https://bit.ly/2laMcUI>).
- The Colorado Department of Education also annually publishes “Understanding Colorado School Finance and Categorical Program Funding” describing how the school funding formula operates, how revenues are generated, and state categorical programs (<https://bit.ly/2LS6RYC>).

Principle 6: Make the School Finance and Funding System Transparent and Understandable to Stakeholders

- Revenue generation for education dependent on interaction of Colorado Constitutional amendments.
 - TABOR and Gallagher amendments interactions: When the residential assessment rate remained constant or decreased due to the Gallagher Amendment, the school district property tax base would fall.
 - Because TABOR prohibits mill levy increases without voter approval, school district property tax revenue grew more slowly than it otherwise would have, reducing the money available for the local share of school finance. Since the state was required to make up the difference, the local share of school funding fell while the share covered by state aid rose.
-

Principle 6: Make the School Finance and Funding System Transparent and Understandable to Stakeholders



- Property Tax Bill on a \$200,000 Home, 1994-2018.
- Varying tax efforts toward Total Program Funding resulting from interaction of Gallagher and TABOR amendments.

Principle 6: Make the School Finance and Funding System Transparent and Understandable to Stakeholders

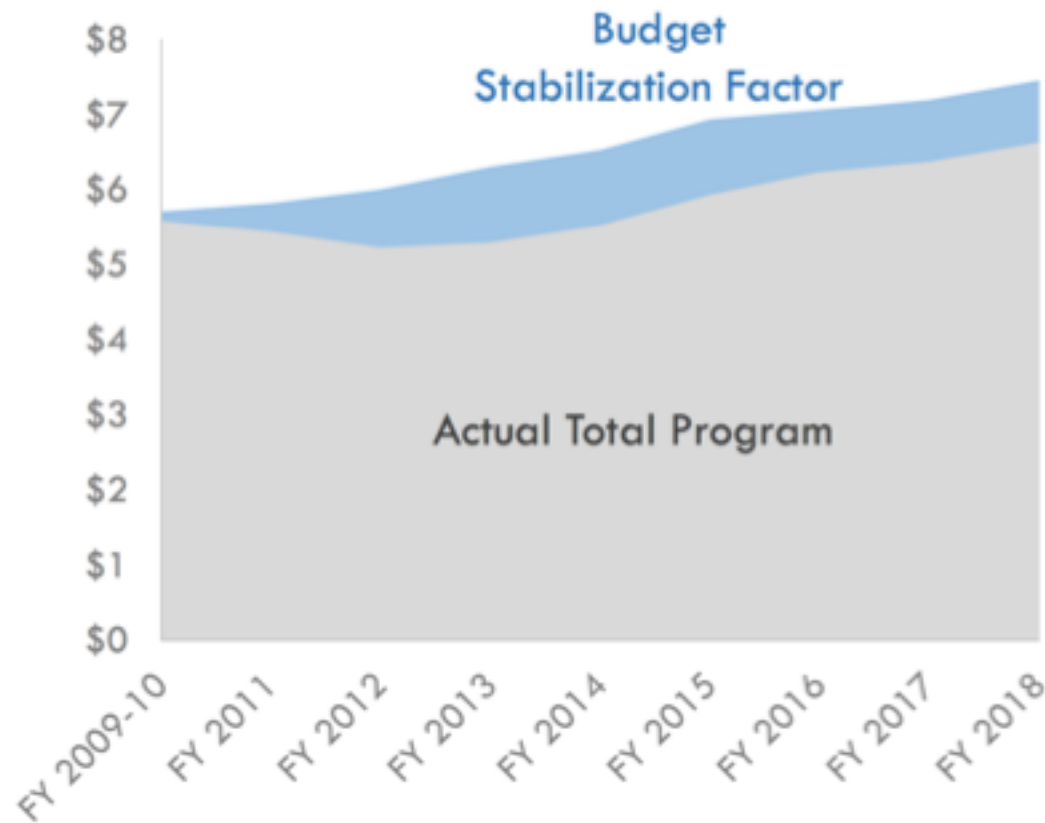
- The Colorado General Assembly enacted the “Public School Financial Transparency Act” (HB 10-1036), HB 14-1292, and HB 15-1321 to make available school and district expenditures data.
- The Colorado Department of Education makes available through the “Colorado K12 Transparency” website expenditures data for schools, school districts, and BOCES across the state.
- The website went live on July 1, 2017 with fiscal year 2015-16 financial data (<https://coloradok12financialtransparency.com/#/>).

Principle 6: Make the School Finance and Funding System Transparent and Understandable to Stakeholders

- The federal Every Student Succeeds Act (ESSA) includes provisions that state departments of education and local school districts report school-level expenditures on local report cards no later than the 2018-19 school year.
- Expenditures must disaggregate local, state, and federal expenditures.
- Must include actual teacher salaries (versus districts' average salaries).
- Report cards must be created in consultation with parents; must be accessible, including online and mobile devices.

For more information, see Education Commission of the States February 2018 brief: <https://bit.ly/2tdlz4K>

Principle 7: Accurately Finance and Fund Learning Needs of Students

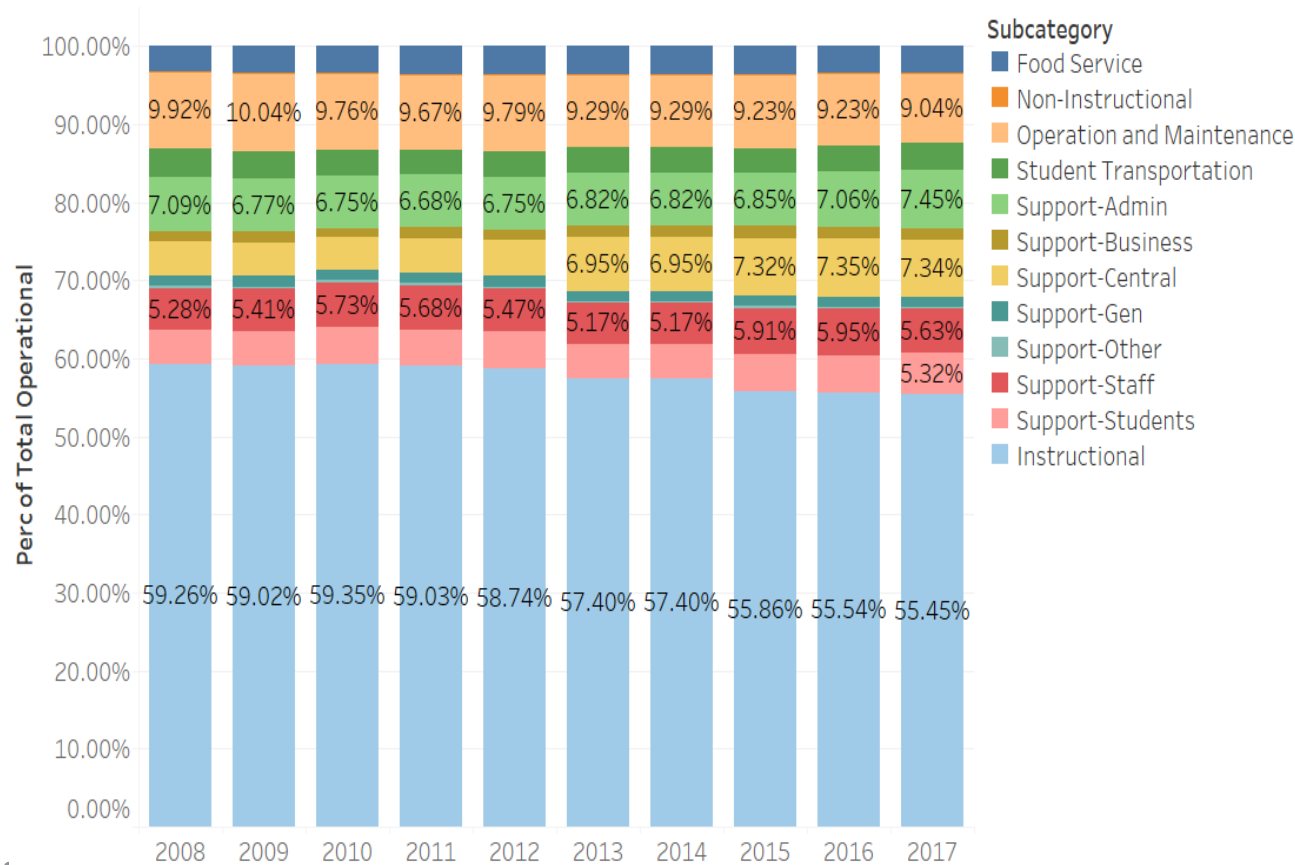


- **Budget Stabilization Factors as Percentage of Total Program Funding, 2010-2018.**
- The budget stabilization factor amounted to \$822.4 million in 2017-18, the difference between actual funded levels and a known value given the state's formulas to generate Total Program Funding.

Principle 7: Accurately Finance and Fund Learning Needs of Students

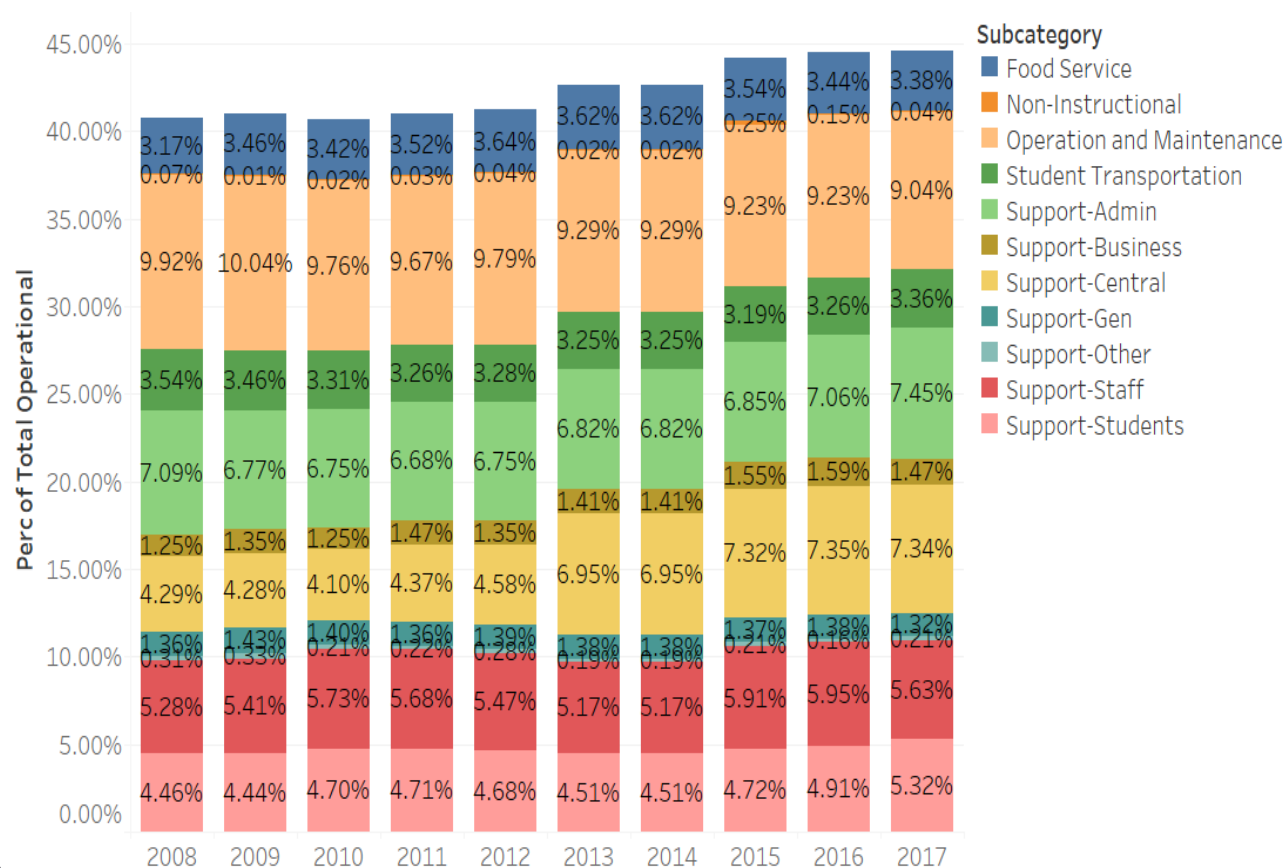
- Categorical program funding exceeds \$200 million per year and other state grants and awards exceeds \$100 million per year to address a variety of student, program, and organizational/institutional needs.
 - What are the needs to be addressed by these programs and grants?
 - What is the problem that we're trying to solve?
 - Did the additional funding impact the need in anticipated ways?
 - Did the change lead to an improvement?
 - What might the state do next?
 - Does the state adopt the program and integrate it into the funding formula? Does the state adapt the program to try and improve it or try to scale it? Does the state abandon the program?
-

Principle 8: Maximize Productivity and Efficiency of Learning Resources



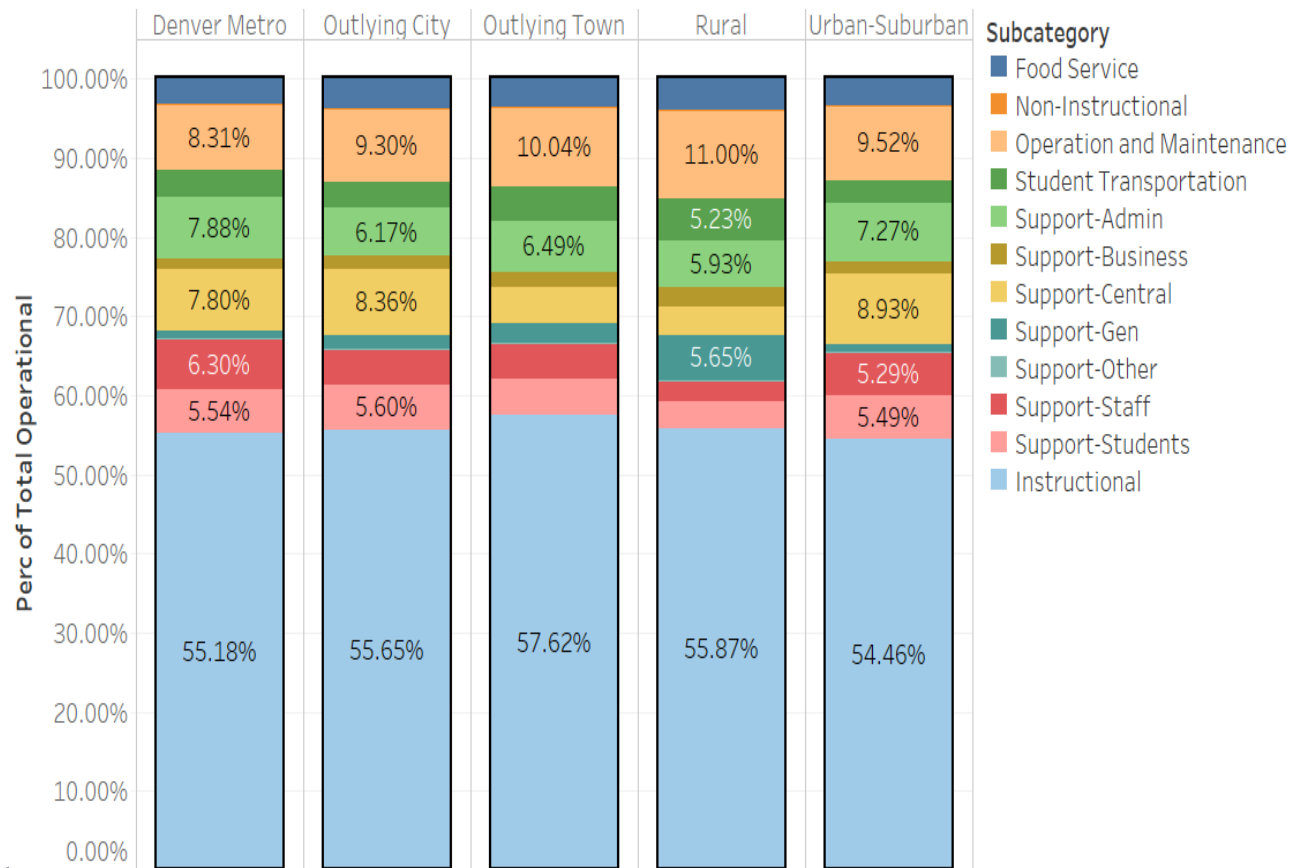
- Distribution of Statewide Total Operational Expenditures by “Program,” 2008-2017.
- Slightly less spent statewide on “Instructional” program activities in 2017 than in 2008.

Principle 8: Maximize Productivity and Efficiency of Learning Resources



- **Distribution of Statewide Total Operational Expenditures by “Program”, 2008-2017** (visually excluding Instructional subcategory for greater detail).
- “Support - Central” program expenditures showed the largest change of 71% between 2008 and 2017.

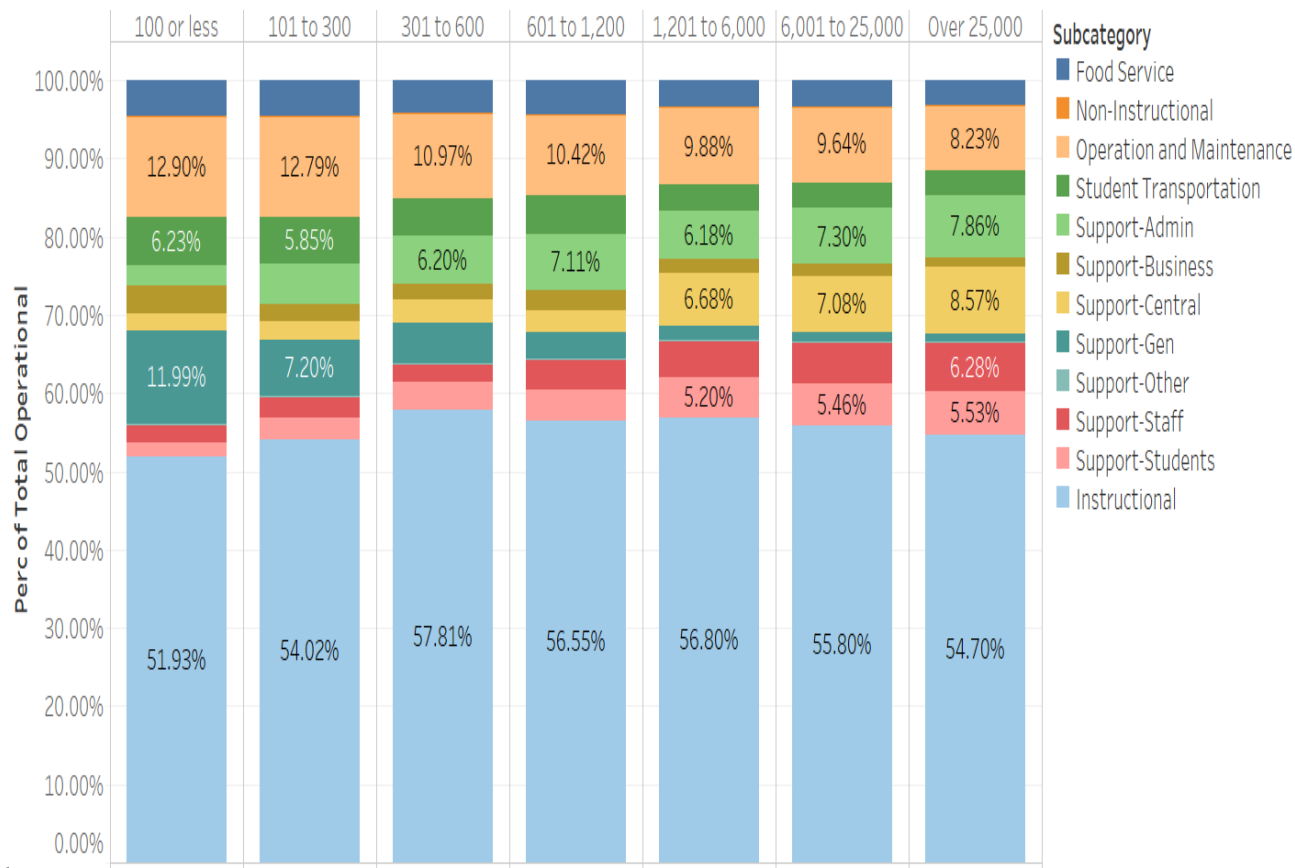
Principle 8: Maximize Productivity and Efficiency of Learning Resources



• Distribution of Total Operational Expenditures by District Setting, 2017.

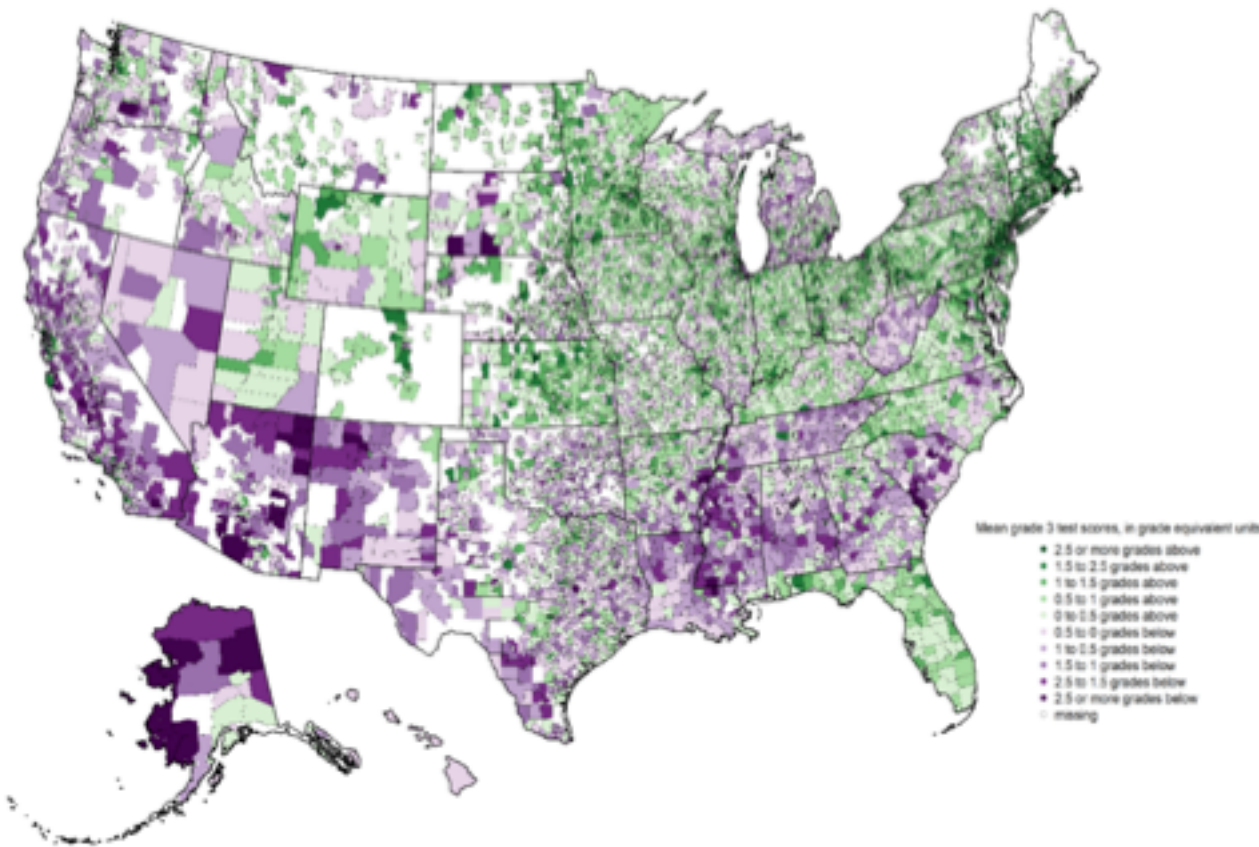
- Similar percentage of expenditures for “Instructional” program activities across district settings.
- Rural districts also expend larger percentage of operating expenditures for “Support – Gen” than districts in other settings.
- Rural districts expend larger percentage of operating expenditures for operations and maintenance than districts in other settings.

Principle 8: Maximize Productivity and Efficiency of Learning Resources



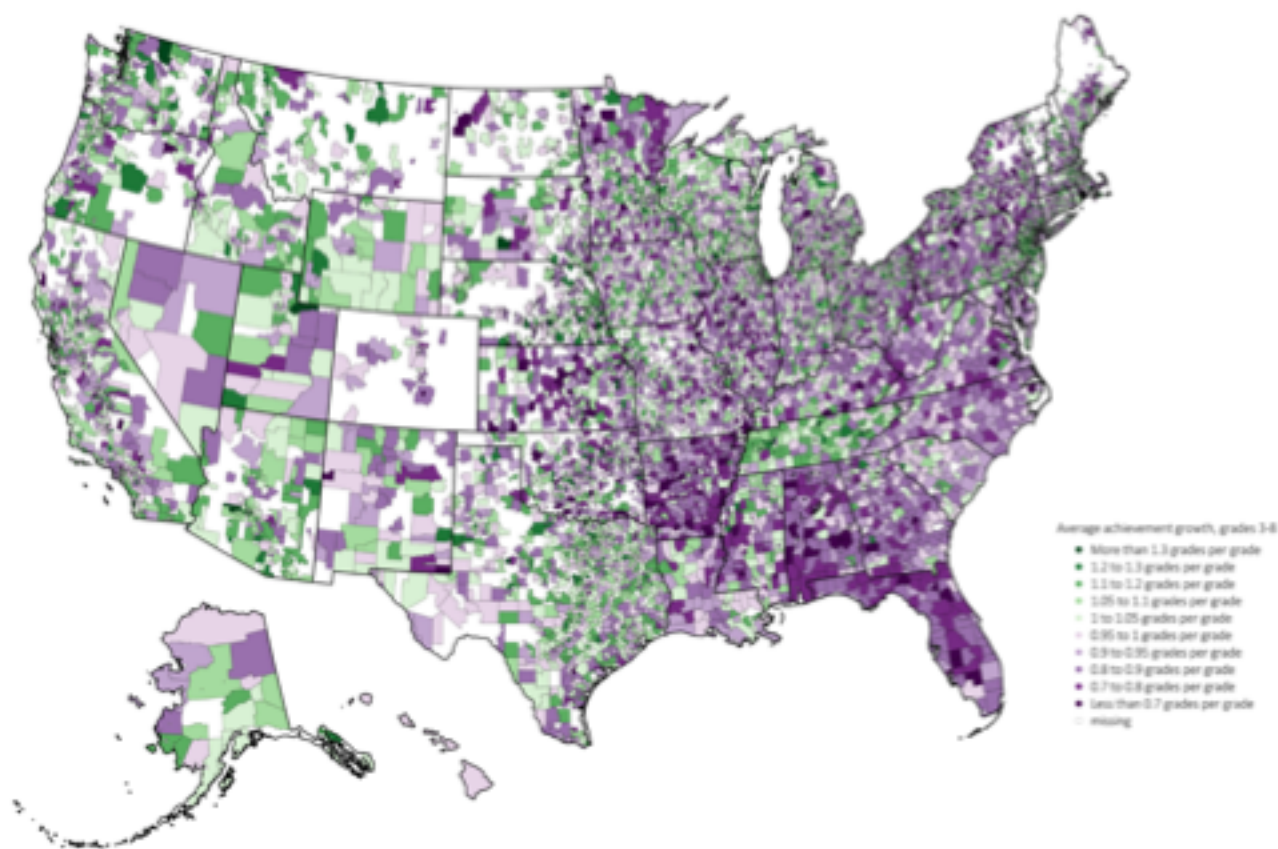
- **Distribution of Total Operational Expenditures by “Program” and District Size, 2017.**
- School districts with 100 students or less expended a lower percentage of operating expenditures on “Instructional” program activities than larger school districts.
- The percentage expended on “Operation and Maintenance” decreases as school districts serve more students.
- Variations in “Support” expenditures: larger school districts expended larger percentage on “Support-Admin” and “Support-Central” than smaller school districts while smaller school districts expended larger percentages on “Support-Gen”.

Principle 8: Maximize Productivity and Efficiency of Learning Resources



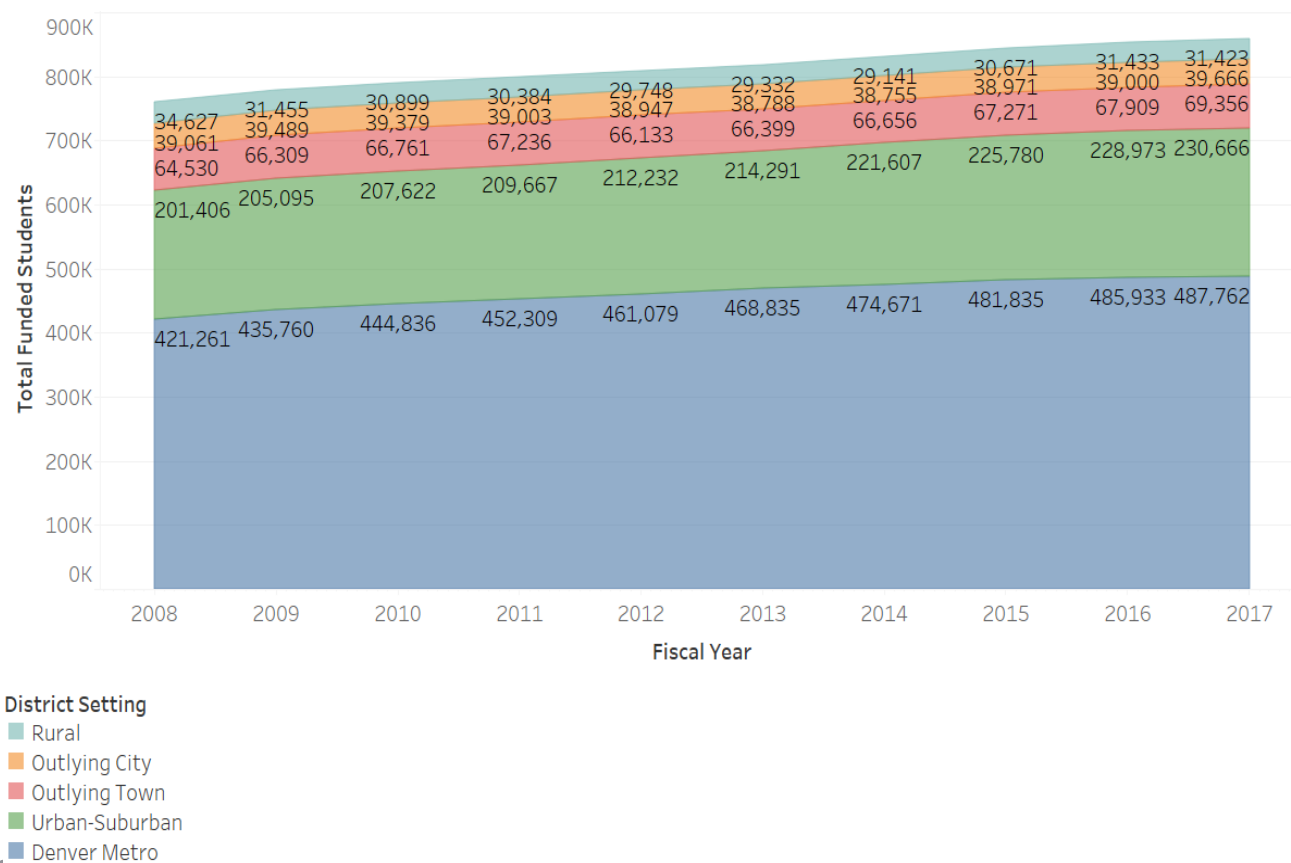
- **Average Third Grade Test Scores (Math and Reading Averaged), US Public School Districts, 2009-2015.**
- An indicator of early childhood educational opportunity.
- For those Colorado districts that have reportable data, average third grade test scores show students at or above grade level with some being 1.5 grades or more above grade level.

Principle 8: Maximize Productivity and Efficiency of Learning Resources



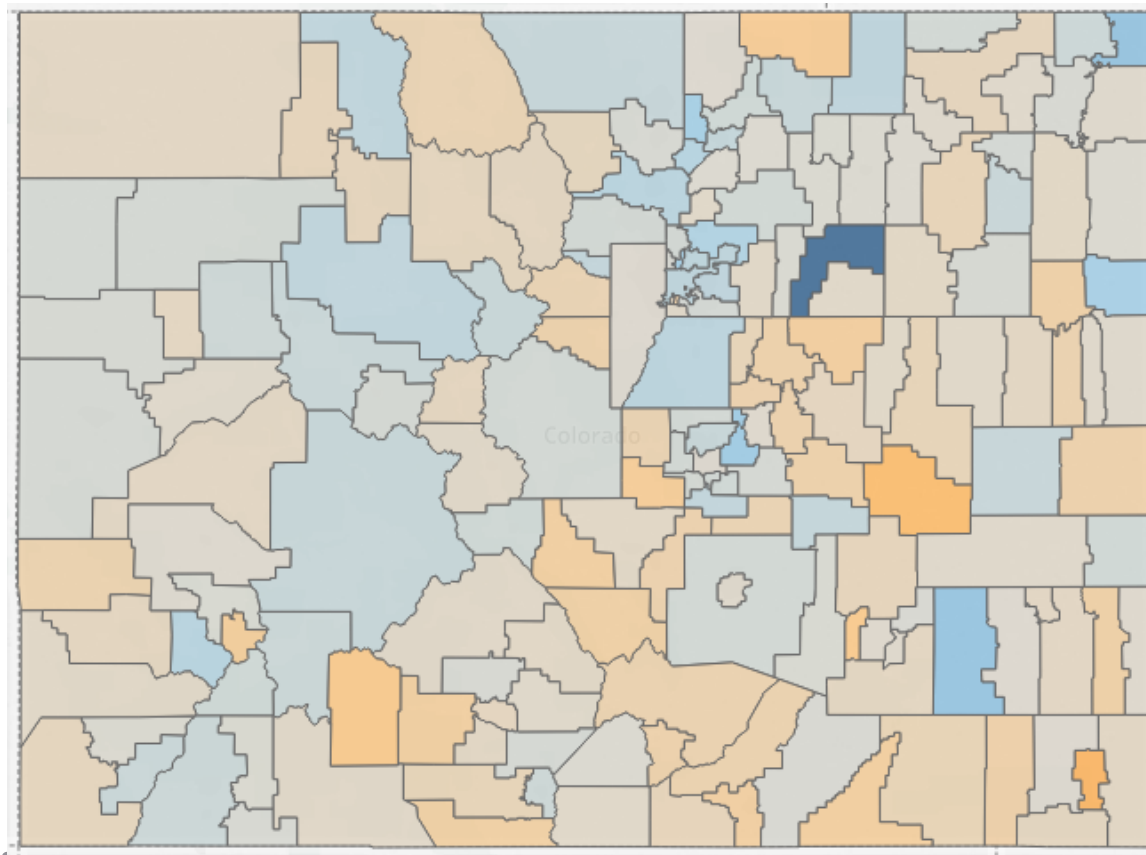
- Average Test Score Growth Rates (Math and Reading Averaged), US Public School Districts, 2009-2015.
- For those Colorado school districts that have reportable data, most are achieving 1.0 grades per grade or less between 3rd grade and 8th grade.

Principle 9: Locally Controlled Educational Management and Methods



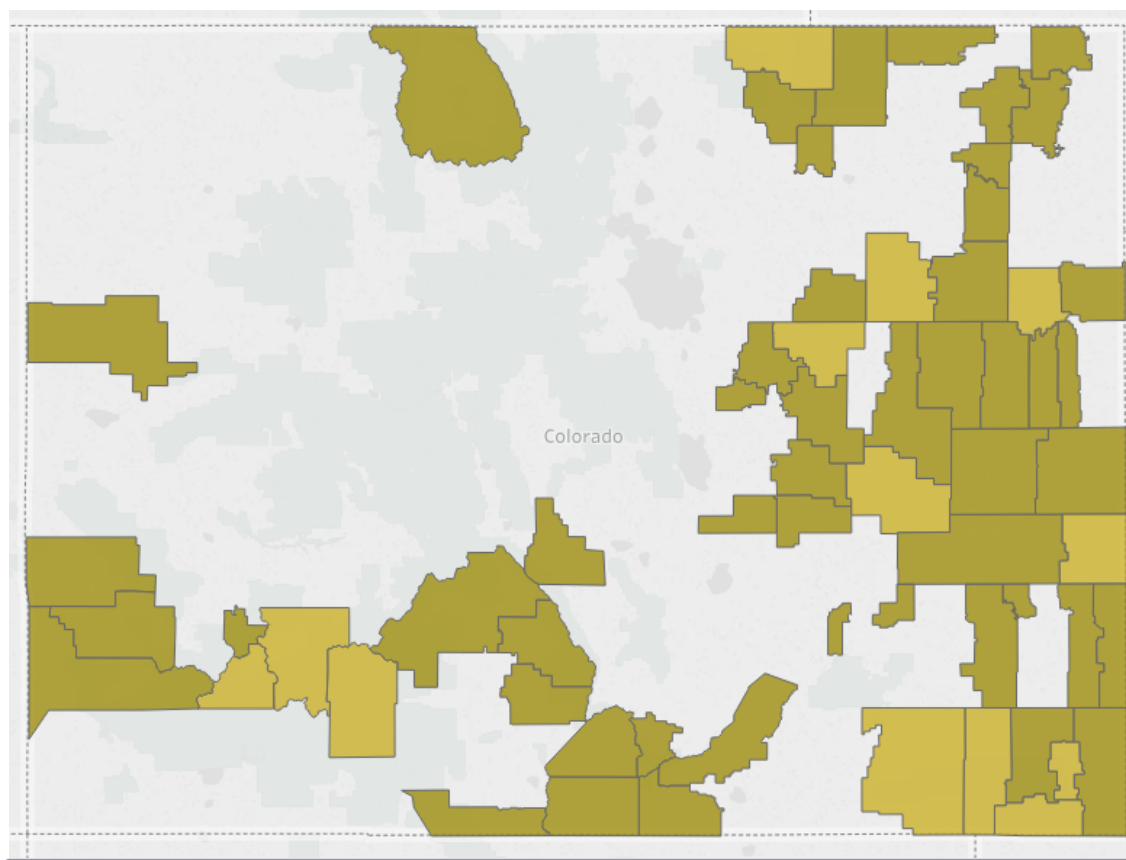
- Ten-year trend in *funded students* by district setting, 2008-2017.
- Denver Metro category experienced 15.8% increase in the number of funded pupils.
- Urban-Suburban category districts experienced 14.5% increase.
- Outlying Town category districts experienced 7.5% increase.
- Outlying City category districts experienced 1.5% increase.
- Rural category districts experienced 9.3% decrease.

Principle 9: Locally Controlled Educational Management and Methods



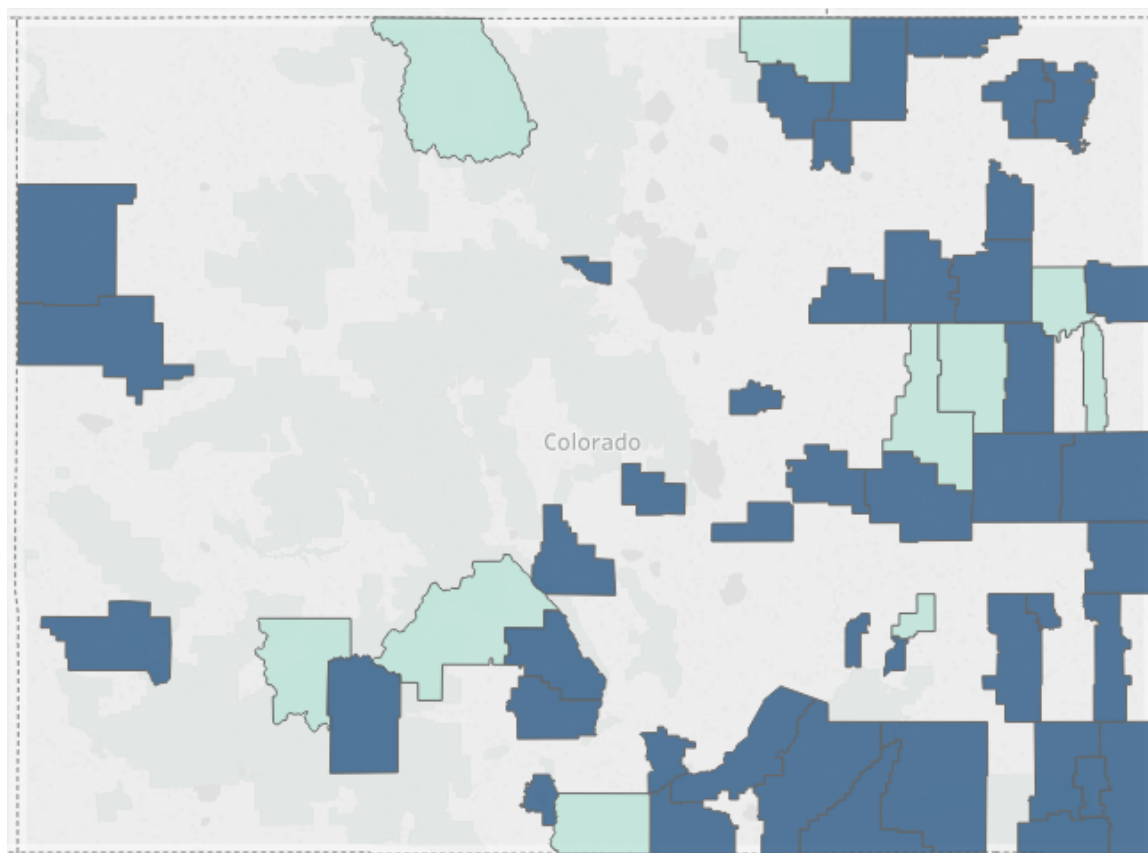
- **Distribution of enrollment changes across school districts, 2008-2018.**
- Organized into 178 school districts that range in enrollment from 4 students (Agate 300) to more than 90,000 students (Denver), and 1 Charter School Institute.
- Statewide enrollment increases does not show the wide variation in enrollment changes across school districts in the state, ranging from a decline of 99% to an increase in 490%.

Principle 9: Locally Controlled Educational Management and Methods



- **School Districts with Fewer Than 300 Students, 2018.**
- There were 108 school districts designated as Small Rural in 2018 with “small” being fewer than 1,000 students. This map shows:
 - Distribution of school districts with 100 students or fewer (lighter shade) – 13 school districts serving 745 students.
 - Distribution of school districts with between 101 students and 300 students (darker shade) – 49 school districts serving 9,379 students.
- There were another 39 school districts designated as Rural with enrollments of 1,028 students (North Conejos RE-1J) to 6,121 students (Windsor RE-4).

Principle 9: Locally Controlled Educational Management and Methods



- **School Districts With Two or Fewer Schools, 2018.**
- Distribution of school districts with one or two schools, 2018.
 - Nearly one-third (30.3%) of Colorado school districts have one or two schools operating in 2018.
 - 10 school districts have one school (shown in light green).
 - 44 school districts have two schools (shown in dark blue).

QUESTIONS & DISCUSSION

Know: What do you think you know from these data and analyses?

Wonder: What do you wonder within these data and analyses?

Learn: What do you still want to learn given these data and analyses?

Pivoting to Design:

Revisiting Principles and Prioritization